

**A STRUCTURED APPROACH TO DEVELOP
QUALITY SYSTEM IN SERVICE INDUSTRIES :
A STUDY ON HOTELS**

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by

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to the

**DEPARTMENT OF INDUSTRIAL AND MANAGEMENT ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, KANPUR**

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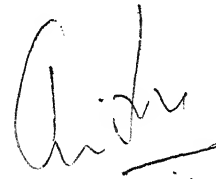
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Rabindra Kumar Panigrahi

ABSTRACT

It is becoming increasingly evident that the service industry is going to occupy a prominent position in the economy of the nation. There is a perceived need for documented and organized literature on how to achieve quality in service organizations. In the present study, a modest attempt has been made to analyze the quality issues in service industry and to propose a structured approach for hotel service.

A hotel service system is visualized as a conglomeration of several service delivery subsystems which are interrelated through internal customer-supplier relationships to provide hospitality to its customers. To control the service delivery subsystems of the hotel, the proposed structured approach describes various service subsystems with the help of IDEF0 (ICAM Definition Method Zero) diagrams for an in-depth understanding of the functioning of service processes. The customer satisfaction parameters are identified for each service subsystem. Using Blueprinting tool, these parameters are related to each stage of IDEF0 diagram, for developing the blueprint of the service delivery process associated with each service subsystem. From the failpoints of blueprint, a set of quality elements which are the critical operational parameters associated with the service delivery process are identified. Measurement and control mechanisms for the quality elements are proposed for each service subsystem.

To assess the quality of actual service provided to the customers, various feedback mechanisms are proposed. Methods are also proposed to measure the variations of quality in service. Any variation of the level of quality, so measured, will indicate that there are inefficient service processes which result in bad quality of service delivery. To troubleshoot the problems associated with these processes, the use of several problem solving tools such as QFD, cause and effect diagram, are discussed.

To effectively manage the quality of service in practice, organizational aspects related to effectiveness of the system and human resource development and management issues which influence the quality of service have been discussed. Finally, a generic quality management system is proposed for hotel service.

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INTRODUCTION

1.1 Importance of Service Industry : A Dawning Reality

In *The Coming of Post Industrial Society*, Bell (1973) uses the metaphor of game to describe how the nature of work has changed as the economy has evolved over the years. Work was initially a "*game against nature*" in which brawn and energy were the skills to work in the land and sea for varied purposes. Next came a "*game against fabricated nature*", in which efficiency and organisation were used to produce a stream of goods from people and machines. This will be followed by the emergence of a service-dominated post-industrial economy in which work become a "*game between persons*" - between teacher and student, between bureaucrat and client, between hotel clerk and guest - in which interpersonal skills must supplement technical skills if the game is to be played well.

The above statement was made in 1973. At that time, Bell anticipated that a service dominated post industrial economy will arrive in the future. Let us look at the present situation of the economy. In the year 1988, 72% of GDP of USA has been contributed by its service sector [Bowen, 1990]. Even in India, a developing country, for the year 1995-96, service sector contributed 42% of GDP compared to 29.24% contribution from farm sector and 28.75% contribution from manufacturing sector [India Today, Mar, 1997]. These figures actually understate the full extent of service activities. The data exclude a part of service activities carried out in manufacturing organisations. For example, data processing, marketing, human resources development, customer relations which constitute important part of manufacturing, are fundamentally service in nature. Further, the priorities of various countries including India as reflected in the national plans, clearly indicate that the post-industrial economy has already arrived.

With the life getting sophisticated day by day, the variety of services is also rapidly increasing. A century back, the services of importance were primarily education, banks and health care. Now it spans a vast continuum: the beauty parlours and entertainment service to the insurance

service and coaching centres. In a recent study to investigate the customer switching behaviours in service industry, a sample of as much as 45 different services shows that while these services are diverse, they are also distinctly different and often have peculiar characteristics of their own such as beauty parlour, auto mechanics, insurance agents, dry cleaners, professional gymnasiums, hotels, accountants, etc. [Keavny, 1995].

The importance of services in relation to that of manufacturing activities is increasing rapidly. The emerging concept of *hollow organisations* points to the trend that will dominate the future. The manufacturing organisations (say, a major automobile company) will out-source more than 90% of its production activities to the vendors. It would only assemble the final product, put its brand name on the product and market it. Their entire operation, except a small part, would thus turn service in nature.

It can be concluded therefore that the service sector is going to play a significant role in shaping the future of economy and the economy of future. Consequently, the focus of the studies in the area of management activities and decision models, which at present are highly biased towards manufacturing operations, will be gradually shifting towards service operations.

1.2 Service and Manufacturing : Some Contrasts

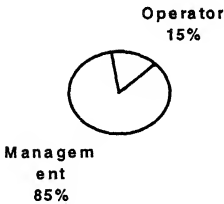
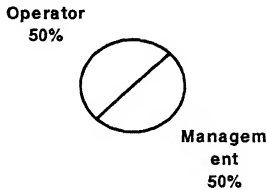
The nature of the service industry differs from that of manufacturing in terms of both *what* is exchanged - services versus goods, and *how* exchange typically occurs - the roles played by the organisation and the customers in production and consumption. These differences can be classified according to (a) basic concepts, (b) characteristics of output(s), and (c) the nature of operational activities.

(a) The differences related to the basic concepts can be summarised in terms of three defining attributes of service [Bowen and Scheneider, 1988].

- The first defining attribute of services is that they tend to be *intangible*. Services are experiences that are rendered, while products are objects that are possessed.
- The second defining attribute is that services tend to be *produced and consumed simultaneously*. There typically are no intermediate distribution linkages between production of service and its consumption by a customer.

- The third defining attribute is that *customers tend to participate* in the production and delivery of the services they consume. They act as a ‘coproducer’ of service when they describe their symptoms to doctor and then take their medicine prescribed, or when they fill their own shopping carts and unload them for checkout by the grocery clerk.
- (b) The following table gives a summary of differences between the characteristics of product and service which are the outputs of manufacturing and service industry [Bhuyan, 1990] respectively.

Table 1.1 : Salient differences in product and service characteristics

PRODUCT	SERVICE
Products have life	Services have time dimension
Products can be stored	Services cannot be stored but can be repeated
Products can be inspected	Services cannot be inspected
Product measurement is direct	Service quality is both subjective and objective
Quality responsibility → manufacturing	Quality responsibility → delivery/operation
Quality Responsibility : 	Quality responsibility : 

(c) Lastly, the differences in the manner of working in service industry as compared to manufacturing industry are :

- Direct transaction with masses of people.
- Inspection of service has to be done at the same time as the service is delivered
- Communication with client and behaviour of personnel dealing with customers has an extremely significant effect on customer satisfaction.
- Management finds it difficult to control and direct a personnel to behave and act according to standard sets of instructions. In manufacturing concern it is more easier to ask an operator to work according to standard procedures for production.

Unlike manufacturing industry customers of service industry usually do not prepare a formal specifications of type, amount and quality of the service required. Only after the service is provided, he feels that service is or is not upto his expectations (or specifications).

Human involvement is more while the machine involvement is less. Thus, an extremely large number of ways of making errors is possible in service organisation.

The productivity in manufacturing organisations can be measured directly from the number of products produced in a given time but the productivity in service sectors depends on the number of customers and amount of facilities and services delivered to each customer, and is difficult to measure.

- As compared to manufacturing industry, a large amount of paper work (in proportion to the output) is involved.
- Relatively, a small amount of money undergoes in the transactions.

1.3 Hotel Industry : From an Ancient Tradition to Modern Stars

Providing hospitality to strangers has been a social and religious practice in the long history of human kind. The advent of rapid industrialisation has necessitated movement of persons for business and commercial needs. Movement is also growing for sightseeing and excursion purposes. Besides, the availability of easy and multiple mode of transportation has resulted into movement of larger number of people. Consequently, over the time, demand for lodging and boarding has got multiplied. An explicit need for creating and managing special facilities for boarding and lodging for persons on such movements has got generated. This has resulted in the establishment of separate institutions called 'hotels'.

In the past, the hotel industry has been one of individual ownership. Because of the average hotel size, an individual businessman has been able to finance a hotel-keeping operation and keep the ownership and management united, i.e. the owner takes care of all managerial activities by himself.

Over the years, skyrocketing costs have resulted in the formation of hotel groups/chains. These groups operate several hotels, which are distributed geographically over a vast area. They invest heavily worth crores of rupees in these projects. Consequently, the hotels have developed to become full fledged commercial organisations.

Modern day hotels are big organisations. They employ a sizeable manpower and a large number of facilities and sophisticated gadgets. The control of management has been transferred from owner to the professionally qualified managers. In addition, a maze of complex scientific, financial and operating systems are used for an efficient running of a hotel as an organisation.

The present day's hotel system concept has influenced the social life and at the same time has also affected several other social institutions. Needless to say, it has been influenced by other social institutions too. Thus, the interest is not confined to the owner and customers. Society,

Table 1.2 : Customer-supplier relationship of hotel with different interest groups.

Sl. No.	Interest Group as a customer as a supplier
1	Customer	Receives hospitality from hotel.	Pays the bill. Provides vital customer feedback to improve standard of service.
2	Employee	Receives salary, monetary and non-monetary incentives.	Provides service to the external as well as internal customers.
3	Management	Receives the fulfilment of objectives.	Manages the functioning and exercises overall control.
4	Owner	Receives dividend/profit, prestige, satisfaction	Provide the capital for investment
5	Government	Collects taxes, earns foreign exchange.	Sets policies and ensures fair competition.
6	Civic authority	Collects local taxes, and charges for the infrastructural facilities.	Provides basic amenities : water, electricity, roads, waste disposal system; and ensures law and order.
7	Society	Receives benefits in terms of economic growth, employment opportunity etc. Receives a lifestyle.	Provides manpower and market for hotels. Imparts the lifestyle and keeps a surveillance over the social values.

governments, civic authorities, management and employees - all of them have emerged to be keen and active interest groups in the hotel system. Hotel as an enterprise and these interest groups, both have a mutual interest in each other. Hotel provides value to these stake-holders as a supplier, and also receives their patronage and co-operation as a customer. The customer-supplier relationship is described in the Table 1.2.

1.3.1 Objectives of a Hotel : Service to Customers

The objectives of a hotel are two fold. As a commercial organisation, it has to earn adequate profit to get a reasonable rate of return on investment. Being a service organisation, it has to provide hospitality to customers.

The primary concern of any hospitality service is providing boarding and lodging to its customers. However, with the need and availability grown, a lot more services are added to its core service. Besides, the core service of boarding and lodging requires many other supporting services like advanced reservation facility, billing, providing information about the places etc. Thus, a modern hotel has grown into a conglomeration of several services, operating under one roof. Type of services provided by a typical modern hotel can be broadly classified as primary, secondary and additional services.

- (1) Primary Service: The principal purpose of a hotel is to provide the customer with lodging and boarding.
- (2) Secondary Services: This includes services which enhances the quality of primary service. It makes the stay in the hotel more enjoying. The services provided in this category are:
 - a. Entertainment service
 - b. Swimming pool
 - c. Dancing room
 - d. Gymnasium and other games and sports facilities
 - e. Television and other entertainment room services
 - f. Comfortable lobby space
- (3) Additional Services: These are value added services. The customers some times expect these services as added services to the basic hospitality service that a hotel should provide. They are:
 - a. Conference room facilities (it is principal service for customers coming for conferences)
 - b. Transportation service
 - c. Business centre and mail-handling facilities
 - d. Telephone service in the room
 - e. Health related service
 - f. Money changing facility
 - g. Shopping complex
 - h. Exhibition rooms
 - i. Sight seeing service

1.3.2 Issue of Quality in Hotel Service

In today's era of liberalisation and globalization, every industry faces increasingly more competition. Hotel industry is no exception. Rather, the presence of so many of hotel groups in the market ensures that the level of competition remains considerably higher than other service industries. It becomes increasingly difficult to keep one's market share intact for a long time. For any hotel, a reasonable capacity utilisation of room capacity is essential to earn a reasonable rate of return in investment for its economic survival. Hence, retaining regular customers and attracting new customers are the priorities for the present management.

'Customer is the king', the slogan has to be accepted by the management. Satisfying the customer should be the objective of hotel, rather than providing boarding and lodging facility only. Any hotel which wants to retain the customers in the long run, will have to constantly outperform the competitors when it comes to customer satisfaction. This requires that customer dissatisfaction should be avoided at any cost.

In today's competitive environment, where customer is becoming more demanding, even a single instance of bad service can be highly detrimental to the reputation of a hotel. The cases of failed service encounters will result in the loss of hard-earned customer loyalty. Besides, providing bad service to the customer may have other repercussions which negatively affect the interest of organisation. Of particular importance, is word-to-mouth communication. If the experience of service offering does not satisfy a particular customer, then he will speak about the same to several potential customers. Thus the hotel will lose that customer along with several other potential customers. In-fact, the power of badmouthing is so high that even reputed hotels with a very high retention rate (as much as 70%) never remain complacent about the instances of customer dissatisfaction. They have elaborate mechanism to take corrective action immediately and pacify the customer in such instances.

Customer has some expectations when he is coming to a hotel. He has definite expectations and may be even imaginations for enjoying his stay in the hotel. While leaving, he has some experience with the hotel. The endeavour of any hotel is to minimise gap between customer's expectation and actual service provided to him. To ensure that customer is always satisfied with the service of hotel, every hotel should try to provide quality service. Providing quality service is the key to fulfil customer expectation which in-turn result in customer satisfaction.

1.4 Hotels vs. Other Services

The subject of the present study is confined to hotel service. All aspects of hotel service delivery process is analyzed for achieving service quality in a hotel organization. Besides, while describing specific concepts like using problem solving tools, the illustrations are taken from hotel service only. By confining the study to a particular service organisation, it is possible to have a better understanding for achieving service quality. The generalisation of the study would have made the study less relevant to the problems faced in practice. Nonetheless, the methods and framework proposed in this study can be applied to other service organisation also. The hotel service represents typical operation of a service organisation and hence methods that are applicable to hotels to achieve quality service can be applied for other services.

However, the characteristics of other services as compared to hotel service should be taken into account while applying these methods. The structured framework for achieving quality, which is the focus of this study, can than be suitably modified for application in other services. For this purpose, a comparison of the characteristics of different services and manufacturing is described in the Table 1.3.

1.5 Why this Study?

Though, the importance of providing quality service is well understood, it is found that hotels generally shy of using any form of structured program to ameliorate quality of service. Examples of formal quality system in service industry in general and in hotels in particular are difficult to find.

The problem lies in the fact that the quality concepts are initially developed for manufacturing sector. Manufacturing organisation are more defined in its operation practices and its product characteristics are more specific and easily measurable. Therefore, it is easier to develop and establish quality systems in manufacturing environment

It is rightly said that *'quality in service sector is hard to define and easy to ignore'* Services by nature are different from products (discussed earlier in section 1.2). In service sector, customer requirement is more subjective and operations are not standardised like in

Table 1.3 : Comparison of major service industries along with manufacturing industry

	Manufacturing	Education	Hotel	Bank	Hospital
Goal	Eliminating defects	All students can learn.	Visitors should be provided with boarding and lodging.	Facilitate deposit, withdrawal and loans to its customers.	Patients should get hospital care.
Objective	6-sigma limit	Graduate on time with adequate skills.	Guest should get a satisfying experience of lifestyle inside the hotel.	Operate profitably, fulfil social welfare targets and give quality service.	Curing the disease with least cost, less time and quality service.
Process	Defined	Not defined.	Defined for the rigid part of the system but customer encounter process is not defined properly.	Defined and followed.	Defined broadly but not followed regularly because of variation in customer's characteristic is high.
Cust-supplier relationship	Structured.	Complex.	Unstructured.	Structured.	Structured.
Customer's voice	In successful company customer's voice blends harmoniously.	In education the voice of customer takes long time to be reflected in the service offering.	Dissatisfied customer's will go around and talk to friends about the bad service experience and in more harsh words even for small troubles.	Verbal complaints are almost routine affairs in a bank. They will prefer to talk to immediate employees dealing with him.	Voice of customer is muted or confined to verbal request for help. It may turned emotional and sometimes violent in case of permanent injury or death.
Who play the key role?	Management and operators	Teaching professionals.	Personnel interacting with guests.	Management & skilled personnel.	Physician and nurse.
Important quality elements	Confirming to product specification	High standard teaching, adequate facility, sufficient opportunities to explore student's skills.	Defect free housekeeping, prompt room service, quality of food, look of service environment, courtesy of personnel, proper operating condition of equipment.	Timeliness and accuracy of transaction, Sufficiency of information, hassle-free procedures, longevity of key personnel, courtesy of counter personnel.	Accurate diagnosis, minimum hospital stay, good nursing care, prompt pain management system, cost effective health care, comfortable environment.

manufacturing sector. Hence, there is always reservation from the service sector to adopt a pre-defined standardised quality methods as being followed by manufacturing process.

Consequent but disheartening is the fact that the academic research on quality also focused primarily to the area of manufacturing leaving a visible void in service industry. There is shortage of documented and organised literature on how to achieve quality in service organisation. Most of the service organisations strive to develop quality procedures based on their own experiences.

The need therefore is to develop and design a structured quality improvement framework which will take into consideration the special nature of service industry. The present study is a modest attempt in this direction.

1.5.1 Objectives of the Thesis

This thesis attempts to prepare a structured framework to guide organisations in their endeavour to achieve excellence in service. It tries to provide a prescription to develop and achieve quality in service. It outlines how a service organisation can start the process of quality improvement and carry out a quality management programme. The focus of this study is on hotel organisation.

1.5.2 Organization of the Thesis

A hotel is viewed as a system comprising various subsystems. The subsystems and the functioning of a hotel have been discussed in chapter 2. The guest interaction process of hotel has been differentiated into four major service delivery systems - room service, front office operation, restaurant service and guest room. Their relationships have been established.

Chapter 3 proposes a structured approach for controlling the service systems to deliver quality service.

To develop measurement and control mechanisms for controlling quality of service, chapter 4 analyzes the four major service delivery systems of guest interaction process according to the framework proposed in chapter 3,

Chapter 5 discusses the feedback mechanisms to assess the quality of service provided to customers.

Proposed various methods for analyzing the variations in quality are described in chapter 6.

Chapter 7 describes the use of problem solving tools in a hotel service environment for improving quality of service.

Based on the understanding for effective implementation of the mechanisms developed in preceding chapters, chapter 8 discusses important organisational issues associated with a hotel that influence providing quality service in practice..

The analysis of above chapters clears the way for developing a quality system for the hotel. A generic quality system is proposed in chapter 9.

HOTEL ORGANISATION : SUBSYSTEMS AND FUNCTIONING

2.1 Describing a Hotel System

A hotel with an overall objective of providing service can be visualised as a conglomeration of different subsystems each accomplishing a set of specific tasks, and all interacting amongst themselves in a manner so as to achieve the over all objective. This approach of describing a system, popularly known as systems approach, helps to analyse each such subsystem and to identify measures for the service delivery of that particular subsystem. The appropriate management concepts can be applied to these subsystems individually with a view to integrate them all subsequently to result into an integrated and effective hotel system.

First of all, the interdependency and the interrelationships between different subsystems that exists in a hotel environment are to be well understood and analysed. For example, it will be a utopian idea to think that room service delivery system will function in a self sufficient manner and in isolation without interacting with any other department. It has to depend upon the front desk for information about guests, on kitchen for preparing cuisine, on stores for purchasing of raw materials, supply department for uninterrupted supply of water and electricity, financial systems for billing, and so on. There can be two possible ways to incorporate this interdependency in functioning of a hotel.

- (a) **Functional Activity Approach** : One way is to keep all other departments (and their branches) who are of use to room service within the subsystem room service itself. That means there will be a stores/purchase department, a supply department specifically dedicated for the room service. This approach of decentralisation may be possible for a large manufacturing organisation, but it might be an uneconomic idea and may not be feasible for organisations like hotel service.

- (b) **Integrated Approach** : Another way is to describe the interdependency as internal customer-supplier relationship. For example, a subsystem A which depends upon subsystem B to carry out the service delivery, is the internal customer of subsystem B. In such a scenario, while analysing performance measures of subsystem A, performance measures of subsystem B will not be taken into account. Only the measures of the output from subsystem B, which is an input to the subsystem A, will be considered for analysis. For example, when the information about the guests is provided by front office to the room service, quality measure will be the correctness of information not the process measure for correct recording and acquiring the information. These internal customer-supplier relationships can be established in two ways [James, 1989].
- (i) A hotel system can be viewed comprising of two major subsystems : one that directly interact with the customer, known as 'front-line services', and the other that act as 'catering services' providing service to the former. The interdependency between catering services and front-line services can be treated as internal customer-supplier relationship. For example, registration acts as a catering service in providing guest related information to room service and restaurant service, and hence registration is the internal supplier and room service is the internal customer. A model describing this type of internal customer-supplier relationship is shown in Fig 2.1.

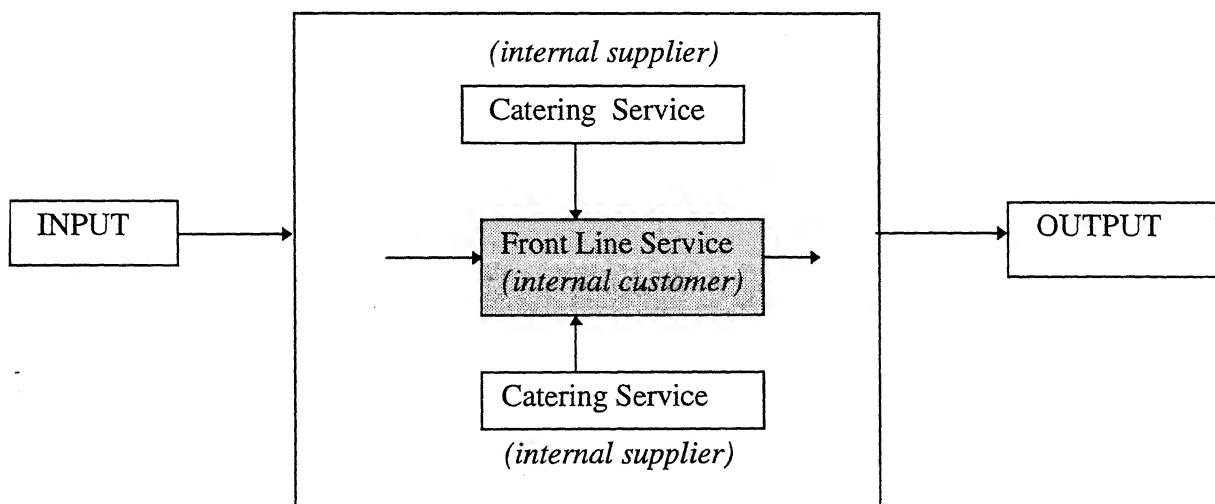


Fig 2.1 : A schematic diagram depicting internal customer-supplier relationship between catering and front-line services.

- (ii) While describing a service delivery subsystem, it can be further decomposed into various stages and each stage of that subsystem can be considered as another subsystem. For example, the subsystems like reservation, car pickup, reception, registration are stages of the subsystem 'front office operation'. As shown in Fig. 2.2, their interdependency can be related as internal customers and internal suppliers, in which the subsystem corresponding to a stage will be internal customer to the subsystem of its preceding stage(s).

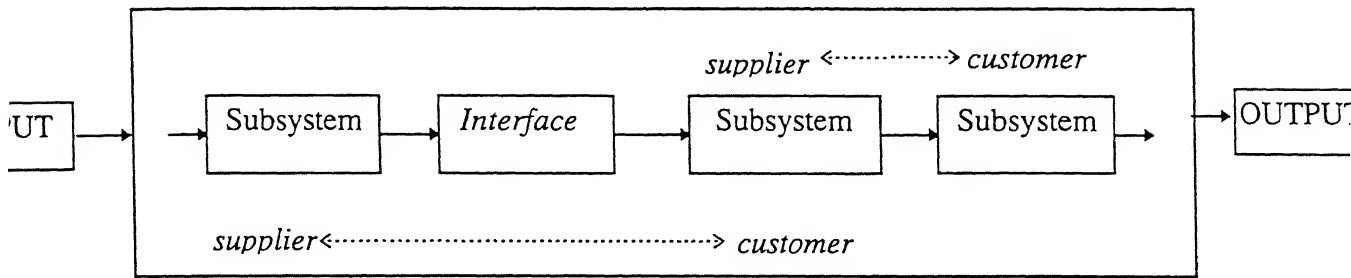


Fig 2.2 : A schematic layout showing internal customer-supplier relationship between different stages of a process.

2.2 Subsystems of a Hotel

A hotel system with different interrelated functions and activities can be classified into five major categories: administrative, front office, housekeeping, food and beverages, and others. Table 2.1 shows the major subsystems under each of them .

Table 2.1: Five major categories of subsystems of a hotel system

Administrative	Housekeeping	Food and Beverages	Front office Co-ordination	Other Services
<ul style="list-style-type: none"> • Selection • Training • Customer feedback • Planning and designing • Security • Financial management • Information systems • Procurement 	<ul style="list-style-type: none"> • Guest room upkeep • Public area upkeep • Velvet service • Linen service • Apron laundry service • Gardening • Engineering • Storage 	<ul style="list-style-type: none"> • Room service • Butler service • Restaurant service • Kitchen • Storage 	<ul style="list-style-type: none"> • Reception • Registration • Reservation • Bellmen service • Information • Mail handling • Car pickup 	<ul style="list-style-type: none"> • Swimming pool • Health club • Book shop • Shopping complex • Business centre

As mentioned in the earlier section a hotel system can be viewed as a composite of two subsystems : front line services (those in direct touch with customers) and catering services (those not in direct touch with customers). They co-ordinate with each other to deliver service effectively. Each category has several services within itself. Table 2.2 shows the services which constitute the front-line services, while Table 2.3 shows the services which constitute the catering services.

Table 2.2 : Subsystems of front-line service

Sl. No.	Subsystem	Type of services	Main customer(s)
1	Car pick up	Front office	Guest
2	Advanced reservation	Front office	Guest
3	Bellmen service	Front office	Guest
4	Reception	Front office	Guest
5	Registration	Front office	Guest
6	Mail handling	Front office	Guest
6	Information	Front office	Guest
7	Guest room	Guest room experience	Guest
8	Room service	Food and Beverages	Guest
9	Butler service	Food and Beverages	Guest
10	Restaurant service	Food and Beverages	Guest
11	Velvet service	House keeping	Guest
12	Business centre	Other services	Guest
13	Billing	Front office	Guest
14	Checking out	Front office	Guest

Table 2.3 : Subsystems of catering service

Sl. No.	Subsystem	Type of services	Main customer(s)
1	Selection of employees	Administrative	All departments
2	Training	Administrative	All departments
3	Customer feedback	Administrative	All departments
4	Planning & designing	Administrative	All departments
5	Security	Administrative	Housekeeping
7	Accounting	Administrative	Billing.
8	Linen service	Supporting services	Guest room and Restaurant.
9	Apron laundry service	Supporting service	Employees of all departments
10	Guest room upkeep	Supporting services	Guest room
11	Public area upkeep	Supporting service	All departments
13	Engineering	Supporting service	Housekeeping
14	Procurement and storage	Supporting service	All departments
15	Information management	Administrative	All departments

2.3 Major Customer Interaction Operations

2.3.1 Four Major Service Delivery Systems

As discussed earlier and shown in Table 2.2, there are several subsystems which directly interact with the customers. These subsystems primarily responsible for outcome of customer experience. A customer's interaction with the hotel can be categorised into following four major categories of service delivery systems.

1. **Front Office Operation** : The service delivery process through which the customer goes to reach the room. This includes reservation, car pick up service, reception, registration, Bellmen service and providing information.
2. **Guest Room** : The place of stay which emulates the experience of the guest with the services he is provided with during the stay. These include a room equipped with all the necessary amenities with no visible defects, and at the top of every thing a decor and environment which impart the feeling to a customer of being a guest..
3. **Room Service** : It includes the services that are provided to the customer in the room itself either as compliments from the hotel, or on the orders for specific service by the customers.
4. **Restaurant Service** : Provision of food and beverages in a restaurant which is a part of the hotel.

2.3.2 Internal Customer-Supplier Relationships

As stated above, the four major service delivery subsystems are the main points of interaction between a customer and the hotel. But, all other subsystems are related to them as described in section 2.1. The internal customer-supplier relationships involving all of the above four major service delivery subsystems are shown in Fig. 2.4.

Internal Customers

Internal Suppliers

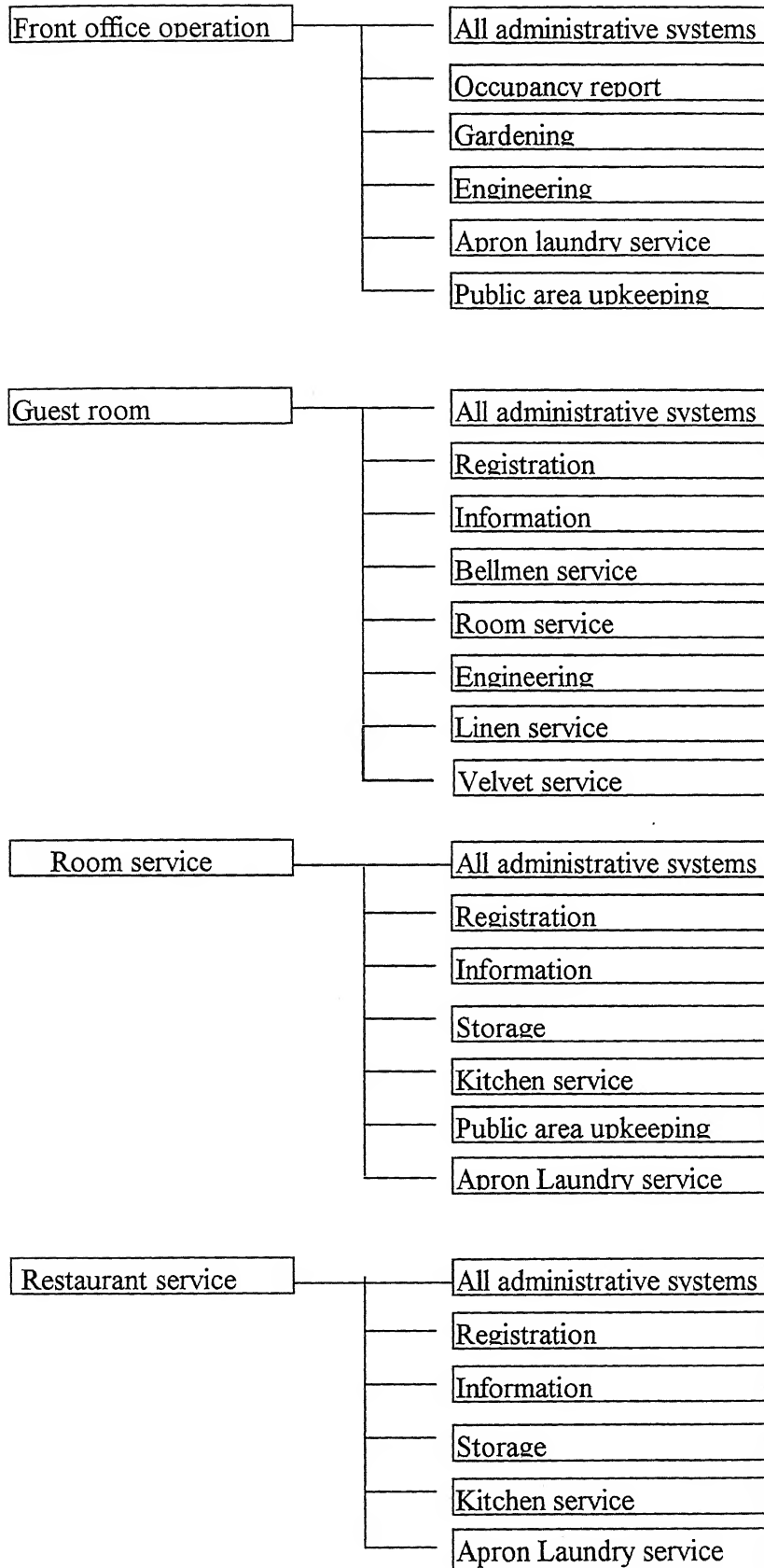


Fig 2.4 Internal Customer-supplier relationship involving five major services

CONTROLLING SERVICE SYSTEMS: A STRUCTURED FRAMEWORK

The preceding chapters present an overall description of service delivery process of a hotel and how it can be modeled and analyzed as a conglomeration of several service delivery subsystems. The aim of this chapter is to propose a structured framework to control these systems for delivering quality output. The proposed framework constitutes three sections :

- (1) Describing the service delivery systems,
- (2) Identifying the measures that control service systems, and
- (3) Developing measurement and control mechanisms.

3.1 Proposed Method for Describing Service Delivery Systems

For describing the details of the activities carried out, a process description document has to be prepared, which will faithfully encompass various relevant entities of the system which are responsible for providing service delivery to the guests. It helps to understand the functions, activities and entities associated with the service delivery. The preparation of the document requires two major steps : collecting information and depicting the process.

3.1.1 Collecting Information

Collecting information about the process is the first step. The information should be accurate, timely and sufficient. The type of information collected are :

- The stages and activities that make up a process,
- The inputs (information like message, control sheets, records, and tangibles such as consumable, containers, etc.) to perform each activities,
- The products generated by the process for the next stage of that process,
- The procedures that direct how to carry out the activities at that stage,
- The personnel involved at each stage of service delivery,

The tangible and intangible factors (other than inputs and outputs) associated with each stage, and

Finally, output/input of other subsystems which have an internal customer-supplier relationship.

It is always helpful to get the information from a variety of sources. The possible sources and ways of collecting the information are :

- Studying the established procedure manuals
- Studying the training manuals
- Talking to departmental heads
- Talking to the people who are directly involved with the activities.
- Getting feedback from customers

While collecting the information, it will be beneficial to follow successive activities one by one. This will reduce the chance for non-inclusion of some activities and will also build up the interrelationship amongst the successive activities.

3.1.2 Depicting the Process - the IDEF0 Diagram

Flow charts are typically used to depict the processes. However, flowcharts do not provide the complete information while portraying the process. They usually only document the actions. But the entities that take part in the production of service are not represented by the flow chart.

A graphical technique known as IDEF0 (ICAM Definition Method Zero) is well suited for depicting the complex service processes like hotel service. The technique was originally developed by US Air Force manufacturing industry to better analyze and communicate manufacturing processes to the people involved in the process [CAM-I, 1984 and Keith, 1992]. This diagram has the following characteristics :

- Arrows entering the left of the box are inputs to the process.
- Arrows leaving the right of box are output of the process. These arrows indicate the object or information which are the outcomes of the activity.
- Arrows entering the bottom of the box are the people/tools used to perform the process.
- Arrows entering the top of the box are procedures and directions to be accomplished while performing the process.

- The name in the box is the textual description of the stage of the process which is accomplished

In the present work, it is proposed to use the IDEF0 technique to depict the hotel process. Fig 3.1 is a fundamental unit of IDEF0 depicting the process of registration. The figure shows the inherent capability of IDEF0 to provide complete information about the process. Each fundamental unit describes a single stage of a service delivery. By connecting these boxes for each stage, a complete IDEF0 diagram for a particular service delivery system can be developed.

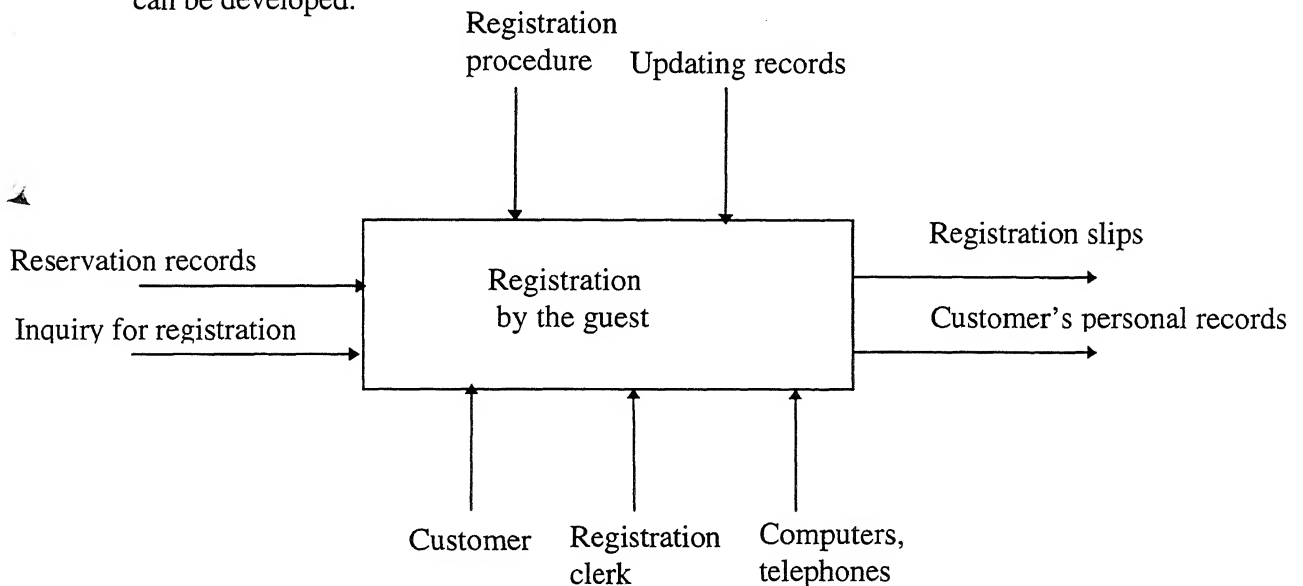


Fig 3.1 : An IDEF0 diagram for registration of guest in a hotel

3.1.3 A Modification of IDEF0 Diagram

The IDEF0 in its original form does not provide full information about tangibles and physical environment which play a critical role, either in carrying out the service delivery more easily or influencing the customer satisfaction directly. Especially in an hospitality service, the role of non-perishable tangibles are highly important. The interior design, the structure of table, the ventilation system, the height and shape of a dining table are critical factors in shaping the customer satisfaction. They are to be properly represented in any analysis of service delivery. The IDEF0 diagram can be modified to take into account the above mentioned concern. A representation as shown in Fig. 3.2 fulfills these requirements. The modified diagram has one more characteristic along with all the features described above.

- The name in the bottom box is the description of settings (the physical environment where service encounter takes place) or tangibles (non-perishables which affect customer satisfaction) that are associated with the service delivery.

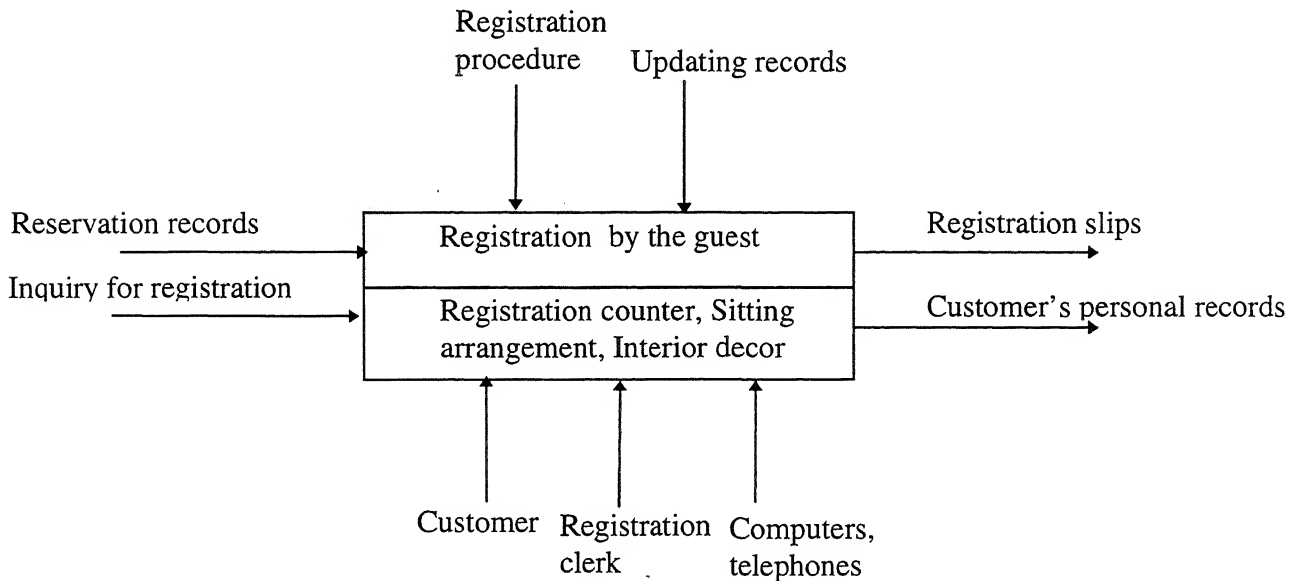


Fig 3.2 : A modified IDEF0 diagram for registration of guest in a hotel

3.2 Method for Identifying Measures that Control Service System

In the earlier section, the IDEF0 diagrams are proposed to describe the process. For controlling the delivery of service, specific control strategies have to be formulated at each of these stages. Before suggesting any form of control for these stages of process, the following questions need to be answered

- What functions are to be measured and controlled at each stage for service delivery?
- How these functions/activities, will be identified?

To answer these queries, King [1984] observes that *most services result from an entire series of functions performed in sequence and the quality assurance system must include standards for critical functions that direct and control customer's interactions with service delivery system*. This means, there exist a set of critical functions that can be defined as the micro-processes of service delivery process that control customer's experience with the hotel service delivery systems. These critical functions can be termed as 'quality elements'. The reasons for calling them quality elements are as follows.

- These critical functions resemble operational elements of a system which influence quality of output from that system.

- To develop a quality control system, these critical functions play the role of key elements of the quality system.
- Quality of service includes both quality of tangibles and quality of intangibles. These can be called quality elements instead of critical functions of the system as they influence the quality.

Thus the set of quality elements has to be measured and controlled for each stage of service delivery. This answers the first question.

The next task is to propose a method by which the quality elements for a particular service delivery system can be identified. These quality elements as discussed before, primarily reflect the importance of interactions carried out between entities to accomplish each stage of process on quality of output. As stated before, if any of the activities carried out during service delivery, influence quality of output, then they can be identified as the quality elements of that service delivery system.. Quality of output can be represented by the set of *guest satisfaction parameters* - the criteria which determine the extent of satisfaction of a guest. Hence, to identify the quality elements of the service system, guest satisfaction parameters should be related to the stages of the IDEF0 diagram for the service delivery system. This relationship can be established by answering the queries '*what are the activities and entities of a particular stage which influence the guest satisfaction parameters?, and in which way they influence these parameters?*'. These queries have to be answered properly for successful identification of the quality elements. If it is possible to find a technique to represent these queries, then the task of identifying quality elements will be greatly simplified.

Blueprinting [Shostak, 1984,1985] is the answer to the above quest. This technique has been used as a tool to blueprint the process of service delivery for depicting and analyzing all the processes involved in delivering service to customers. The technique was primarily developed with the focus on design and positioning functions of services marketing. In this study, it will be used to relate guest satisfaction parameters to the IDEF0 diagram. A typical blueprint for section of front-office operation is shown in Fig 3.3. In this figure, the decision boxes which contain questions are called *failpoints*. Failpoints identify those processes of the service that are most likely to 'go wrong' and thereby affecting adversely the aspects of service quality. Failpoints are of special interest to us because of their relevance to quality elements. They denote the possible reasons at each stage of the process which may affect the customer

satisfaction. Finding the fail points is not easy, however. The following methods can be employed to identify the failpoints :

- As already discussed, relating customer satisfaction parameters to the IDEF0 diagram guides us to the failpoints of the system. A simple format for relating is to answer what a micro-process (i.e. the stage of the service delivery systems) produces, how it produces, which factors are responsible to successfully carry out the process and finally in which way these are related to the internal or external customer satisfaction.
- The persons working in a real environment will be an important source. They should be interviewed and their suggestions should be sought for improvement or modification of the blueprint.
- Besides, troubleshooting customer's complaints also leads to the identification of fail points of the system. They are important to find out the importance of particular failpoints.

From the above discussions, it can be deduced that failpoints closely resemble to the quality elements. The set of quality elements for a service system can be perceived and identified from these failpoints. Hence, each decision box of the blueprint will determine one failpoint which in turn will result in a discovery of the set of associated quality elements.

3.3 A Framework to Develop Measurement and Control Mechanism

3.3.1 Introduction

Methodology for identifying quality elements for a service system is discussed in the previous section. Successful control of these quality elements will regulate the service delivery. Measurement is vital to any form of control. Hence, after successful identifying and listing quality elements, it is imperative to discuss the ways they can be measured and controlled. Along with the measurement and control, the standards for quality elements should also be developed. The standards will help to assess whether the measures are satisfying the requirements for quality service or not.

It may be observed that measurement and control of quality is a topic of great interest especially in services in which measuring quality is more challenging than in case of goods.

The list of elements for even a simple service like providing a cup of tea to the guest in the room is long. It is not feasible to determine measurement and control methods individually for

each quality element. Hence, they should be categorized into different sets of quality elements associated with specific factors and then the measurement and control for one set of quality elements can be discussed simultaneously. Categorization is done taking into account similarity of like methods for measurement and control. The underline philosophy is - with similar characteristic of the quality elements, the ways of measurement and control will be similar if not identical.

Thus the proposed measurement and control mechanism includes :

- Factor representing one set of quality element.
- Items that constitutes the set.
- Critical parameters of the quality elements which have to be measured and controlled.
- Possible ways in which these quality elements can be measured.
- Possible standards for each measure.
- Methods to control these elements.

A scheme for measurement and control of quality elements for two factors related to room service is shown in Table 3.2.

Table 3.1 : A sample scheme for measurement and control of quality elements

Factors	Items	Critical parameters	Measurement ways	Possible standards	Control methods
Consumable	Provisions (Tea, Sugar Ghee, etc.) Drinks	<ul style="list-style-type: none"> • Pure • Hygienic • Taste 	<ul style="list-style-type: none"> • Check at purchase • Inspection by cook before use • Measuring scientifically quality of raw materials in stores 	<ul style="list-style-type: none"> • Ranking on a scale of 1 to 10 and average should not fall below 8.5. • No more than 5 dissents by the cook in a month • Admissible value 	<ul style="list-style-type: none"> • Purchasing renowned brands only • Empowering cook to reject bad quality material before use • Following proper storing condition
Interaction	Phone call Serving in the guest room	<ul style="list-style-type: none"> • Incorrect communication • Incomplete communication • Improper behavior 	<ul style="list-style-type: none"> • Guest comments • Attitude survey by external agency • Making fake phone calls 	<ul style="list-style-type: none"> • Not more than M number of complaints • Ranking by agency • No. of times it is not responded properly 	<ul style="list-style-type: none"> • Skill enhancement training • Giving feedback to employees • Identifying faults by video recording the encounters • Incentive structures • Employing enough manpower to avoid fatigue

3.3.2 Sources of Information

The information regarding the measurement and control methods and the standards proposed are collected while surveying several hotels. It may be noted that, as of now, there is no standard method for measurement and control. Hotels mostly rely upon informal methods like supervisor's capability, long experience, trust on employees to control quality of service. The information regarding the measurement and control methods are collected from various sources like

- Methods used in practice in some hotels.
- Suggestions given by the employees/managers of hotels.
- Suggestions by students of IHM (Institute of Hotel Management) who have gone through a practical training of six months.
- Methods implicitly included in training manuals of personnel of various hotels.
- Techniques used in other services like hospital care, banking etc.

3.3.3 Criteria for Determining Standards

The standards for the quality elements should be best decided by the management taking into account following predicaments into consideration:

- Critical nature of quality elements (the importance of particular element on overall customer satisfaction).
- The resources available to the organization.
- The standards used by the competitors and the leading hotels.
- Profile of customers and their preferences (these influence the level of standards to be followed in different service areas).

3.3.4 A List of Criteria for Determining Measures

Following is a list of criteria which should be taken into account for determining measures in a service system (Lorentz, 1992).

- Measures should be collectable by line staff.
- Measures should be in terms of numbers, percentages so that it can be charted for analysis.

- Measures should not impose any arbitrary floors/ceilings on quality. They should reflect the goal of continuous quality improvement. The standards are typically lower than 100 percent - the rationale is to account for large number of variations encountered in the process of service delivery.
- Measures should not require high technology that make them unavailable for line staff. This will help to use measures for process improvement in daily work.
- Measures should not be time consuming and minimum disturbance is done to the activities connected to service delivery.
- Measures should reflect an explicit relationship (either assumed organization empirical) between key customer demands (e.g. hot food) and key process variable (e.g. minutes from kitchen to customer).
- While direct measurement (behavior of waiter in guest room) is not possible indirect way (job satisfaction, attitude survey) should be followed for measurement.
- Measures should involve organizational commitment and genuine internal interest (i.e. interest not simply determined by inspection survey organizations).
- Measures should yield adequate statistical power: data collected over a specified period (a month) should be able to detect a specified change (from 3% defect to 4% defect) in a particular area of service delivery (delay in answering a phone call).
- Measures should reflect preference for variables (continuous) data over attributes (dichotomous) data because former are statistically more powerful and better embody the notion of continuous improvement
- Measures should be few in number and should have critical influence on customer satisfaction.

The approach and methodology proposed in this chapter for identifying the measures and developing the mechanism for their measurement and control are applied to various subsystems of a hotel in the next chapter.

ANALYSIS OF SERVICE DELIVERY SYSTEMS

In chapter 2, the guest interaction process of a hotel has been differentiated into four major service delivery systems : room service, front office operation, restaurant service and guest room. In this chapter, the four major service delivery subsystems are analyzed according to the structured framework propose in chapter 3. This analysis is aimed at to make it possible to control the service systems of a hotel that will result in delivery of quality hospitality service.

Organisation of the Analysis

- (1) The four service systems : Room service, Front office operation, Restaurant service and Guest room, are discussed in sections 4.1, 4.2, 4.3, and 4.4 respectively.
- (2) Each section starts with an introduction to the service delivery system.
- (3) After that, guest satisfaction parameters which influences the customer's experience with the service delivery system are listed down.
- (4) The IDEF0 diagram for the service systems is developed as discussed in the section 3.1.
- (5) Then a blueprint of each service system is prepared by relating customer satisfaction parameters with the each stage of IDEF0 diagram, as discussed in the section 3.2.
- (6) After the blueprint is developed, the set of quality elements for that service system is identified from the fail points of the blueprint, as discussed in the section 3.2.
- (7) The quality elements are classified into different categories which are described immediately after the list of quality elements.
- (8) Finally, the measurement and control mechanisms are developed, according to the scheme proposed in the section 3.3.

Sources of Information

The information needed for the proposed analysis are collected from several sources:

- One-to-one interview with departmental heads and employees of Oberoi Hotel, Delhi and Landmark Hotel, Kanpur.
- Visiting the work places of Oberoi hotel, Delhi.
- Discussing with the students of IHM (Institute of Hotel Management), Delhi.
- Referring to the books on hotel operation in the library of IHM, Delhi.
- Procedures and other documents of training department of Oberoi hotel, Delhi.
- Training manuals of the training center of ITDC hotels situated at Kutab Hotel, Delhi.

4.1 Analyzing Room Service System

Room service comprises all the services that are provided to guest during his stay inside the room (it excludes the information, business service that are provided by front office). Generally following forms of room services are provided.

1. Butler service. Butler service acts as a source for fulfilling any immediate need of guest. They work as a constant companion to the guest. Occasionally they provide drinks, newspapers and other such items on order from guest.
2. Food and others. These include providing food from restaurant on order and other specific items (that are decided by management) like medicine, book and other such necessities. Main service is providing food to guest.

Many medium and small hotels do not have clean distinction between these two and under one department only. In big hotels, the butler service counters are situated on each floor to have quick access to guest room, and the room service department is near restaurant to have immediate access to preparation of food. Their service delivery are more or less similar in nature. Both provides service on order from the guest.

As both have similar nature, only room service is discussed here. The service delivery process starts with the order from guest room and end with the service in the guest room. To keep the analysis simple and exhaustive, a specific and simple example of providing tea to the guest is discussed. The same analysis will be hold good for any other type of food items ordered. The analysis presented is kept generalised in nature and it can be seen in the process, even some insignificant factors resume importance. The focus of the analysis is how to identify and

manage quality of the room service in a specific situation. The guest experience of receiving a cup of tea on order is the situation.

4.1.1 Guest Satisfaction Parameters

The experience of a customer from the room service delivery process for a specific situation say of getting a cup of tea depends upon primarily on the following factors.

- Tea is of good taste.
- Less service time.
- Service encounter (over phone while giving order and service at room by the waiter) should be impressive to match the expectation of customer.

4.1.2 Describing the Service System

The IDEF0 diagram for the room service is shown in the Fig 4.1. The diagram is self explanatory. The service delivery process described in the diagram is based on the understanding of the information collected from several sources mentioned before.

4.1.3 Blueprinting the Service System

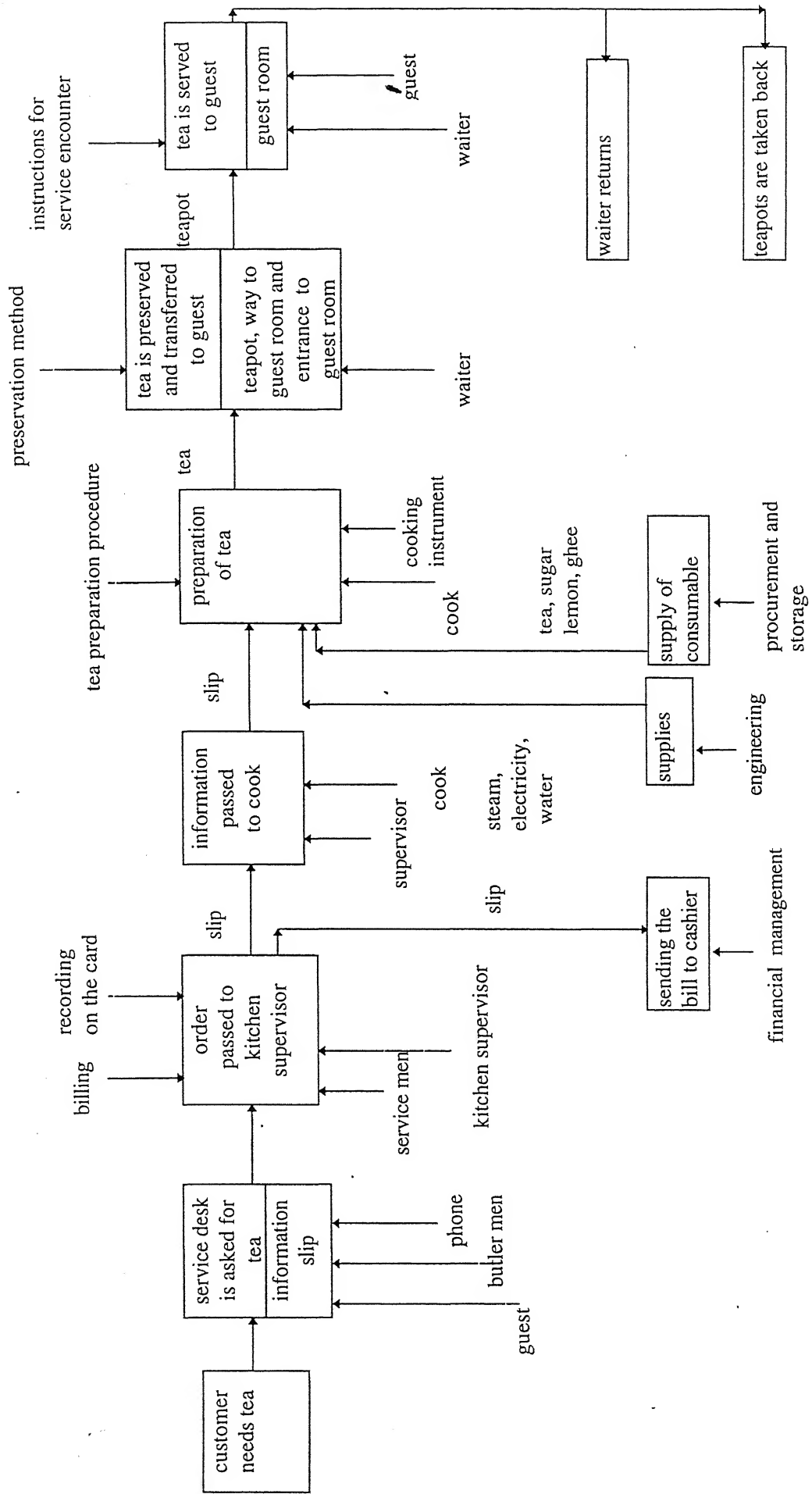
Based on the discussions presented in section 3.2, the blueprint for the service delivery process as shown in Fig 4.2 is developed by relating the guest satisfaction parameters to the stages of IDEF0 diagram (Fig. 4.1).

4.1.4 Listing the Quality Elements of Service System

From the failpoints of the blueprint of Fig 4.2, the quality elements can be identified, as discussed in section 3.2. These quality elements are listed below, according to the stages of IDEF0 diagram.

(i) Service desk is asked for tea

- Availability of an information system made to the guests about various services available including the right person(s) whom to order.
- Availability of an internal hotel phone directory and its proper placement in the room.
- Working condition of the phone.
- Delay in receiving phone call from the guest.
- Quality of communication over phone.



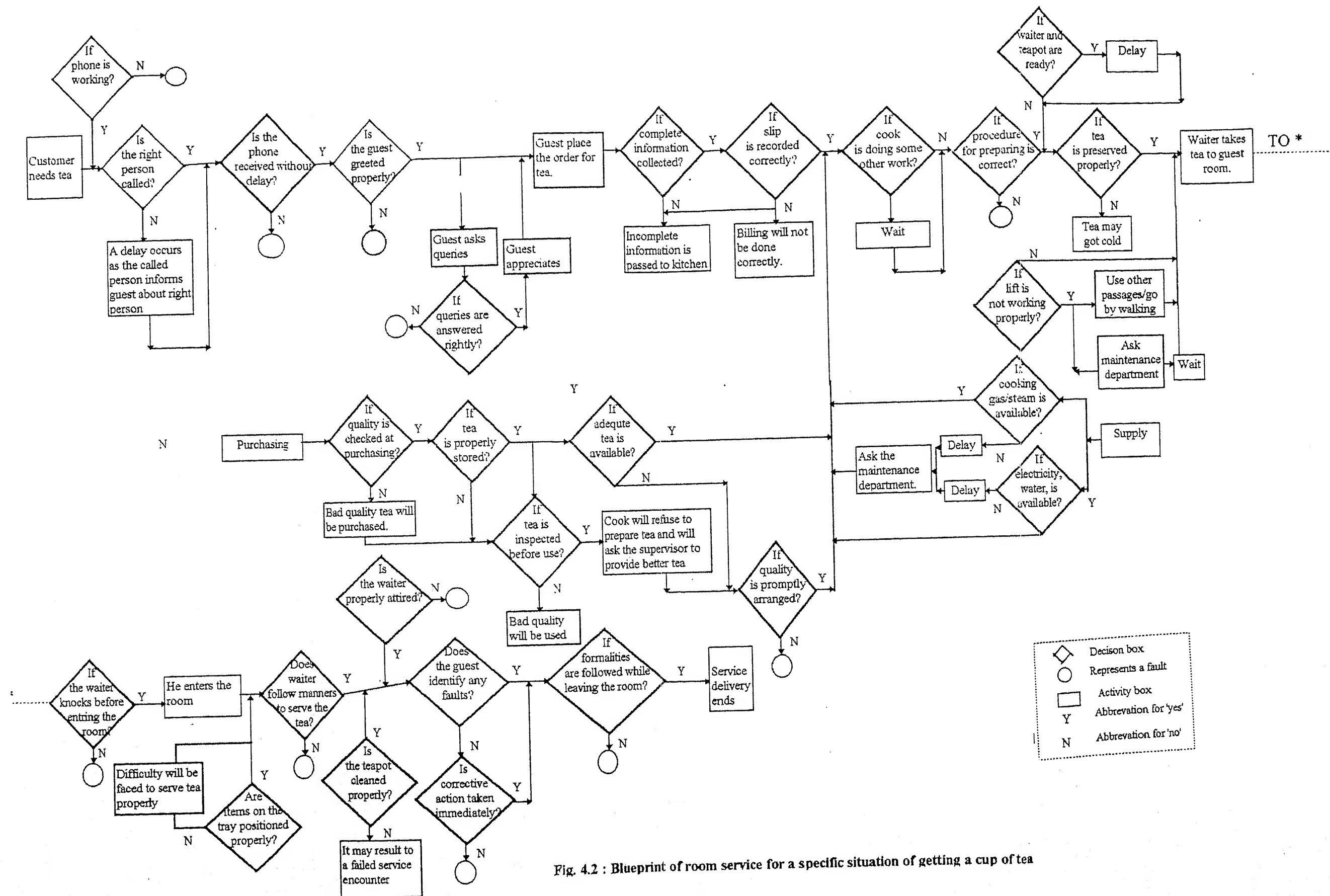


Fig. 4.2 : Blueprint of room service for a specific situation of getting a cup of tea

- Completeness of communication while taking order.
- Ability to answer queries of guest.

(ii) Order is passed on to kitchen

- Delay in informing the kitchen supervisor.
- Readiness of the personnel in the kitchen to receive order.
- Correctness of the information in recording on the order slip.
- Completeness/correctness information supplied to the cook.

(iii) Supply of consumable and supplies

- Availability of raw materials like tea, sugar, butter.
- Quality of the raw materials purchased.
- Condition of storage of the supplies.
- Extent and rigour of inspection and using of raw materials.
- Continuity of supplies like electricity, steam, water etc.

(iv) Preparation of tea

- Condition of working place in the kitchen.
- Working condition of cooking accessories.
- Way of preparation by cook.
- Delay in preparation because of large number of orders pending.
- Adequacy of staff assisting in the kitchen

(v) Tea is preserved and carried to room

- Readiness of waiter.
- Readiness of teapot.
- Level of preservation for keeping tea in hot condition.
- Inconvenience experienced by waiter while going to the guest room.
- Etiquette and procedure followed by the waiter while entering into room and the level of disturbance experienced by the guest.

(vi) Tea is served to guest

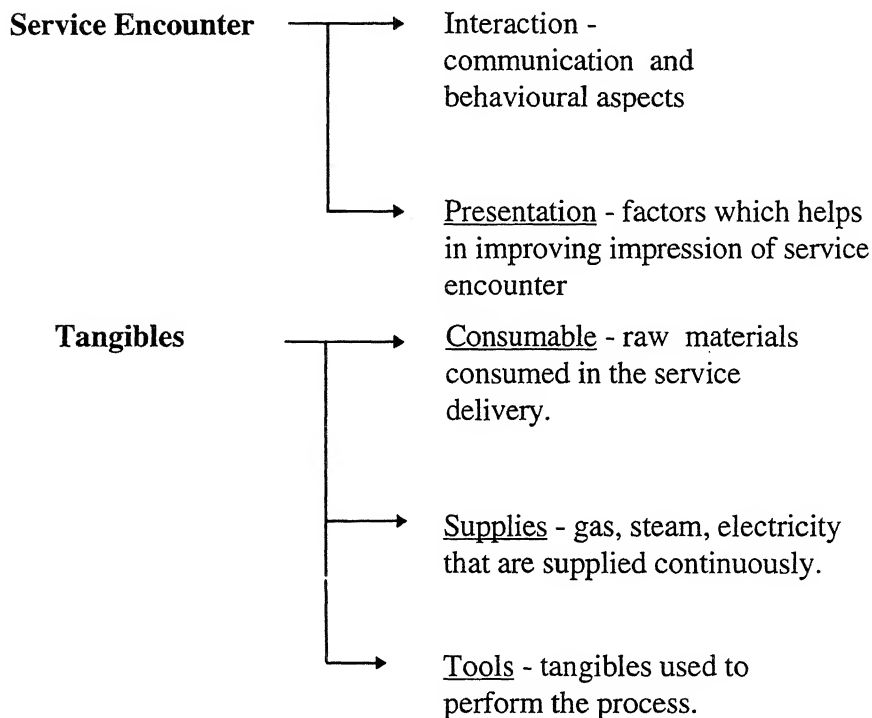
- Positioning of items on tray.
- Way of conversing with guest.
- Manner of serving tea.
- Behaviour of waiter towards the guest.
- Ability to answer the queries of guest.
- Style of grooming of waiter like properly cleaned and mended dress.
- Look and cleanliness of teapot.
- Formalities to be followed while leaving the room.

4.1.5 Classifying the Quality Elements

As discussed in section 3.3, it is imperative to classify and group the quality elements into different categories for developing measurement and quality mechanism for service system, because it is unworkable to discuss all elements individually. These can be classified as :

1. Service encounter.
2. Time dimension.
3. Tangibles.
4. Procedures and instructions.

Tangibles and service encounter can be further categorised as shown below.



4.1.6 Measurement and Control Mechanism for Room Service System

After classifying the quality elements to different categories, it is possible to develop measurement, control methods and standards for measurement, as discussed in the section 3.3. The scheme for Measurement and control mechanism for room service system is given in Table 4.1 according to the format proposed in Table 3.7. The methods discussed are collected from variety of sources as discussed in section 3.3.2.

Table 4.1 : Measurement and control mechanism for room service system

Factors	Items	Critical parameters	Measurement ways	Possible standards	Control methods
Consum-able	<ul style="list-style-type: none"> • Tea • Sugar • Ghee 	<ul style="list-style-type: none"> • Pure • Hygienic • Taste 	<ul style="list-style-type: none"> • Quality check at purchase • Inspection by cook before use • Measuring quality of raw materials scientifically in stores 	<ul style="list-style-type: none"> • Giving a ranking on a scale of 1 to 10. Accepted value is 6 and average should not fall below 8.5. • No more than 5 dissents by the cook in a month • Admissible value for scientific measurement 	<ul style="list-style-type: none"> • Purchasing renowned brands only • Empowering cook to reject bad quality material before use • Following proper storing condition
Supplies	<ul style="list-style-type: none"> • Steam • electricity 	<ul style="list-style-type: none"> • Availability 	<ul style="list-style-type: none"> • A note of dissent by internal customers • Report from maintenance registers 	<ul style="list-style-type: none"> • No more than N no. of dissents • No. of times regular maintenance is not done 	<ul style="list-style-type: none"> • Preparing and following maintenance schedule
Tools	<ul style="list-style-type: none"> • Phone • Cooking instrument 	<ul style="list-style-type: none"> • Poor working condition 	<ul style="list-style-type: none"> • A note of dissent by internal customers • Report from maintenance registers • Guest complaints about phone 	<ul style="list-style-type: none"> • No more than N no. of dissents. • No. of times regular maintenance is not done. • Not more than M no. of complaints 	<ul style="list-style-type: none"> • Preparing and following maintenance schedule
Interaction	<ul style="list-style-type: none"> • Telephone communication • Serving in the guest room 	<ul style="list-style-type: none"> • Incorrect and incomplete communication • Improper behaviour 	<ul style="list-style-type: none"> • Guest comments • Attitude survey by external agency • Making fake phone calls 	<ul style="list-style-type: none"> • Not more than M no. of complaints • Ranking by agency • No. of times it is not responded properly 	<ul style="list-style-type: none"> • Skill enhancement training • Giving feedback to customer contact employees • Identifying faults by video recording the encounters • Devising incentive structures • Employing enough manpower to avoid fatigue
Presentation	<ul style="list-style-type: none"> • Dress 	<ul style="list-style-type: none"> • Look 	<ul style="list-style-type: none"> • Inspection by supervisors 	<ul style="list-style-type: none"> • Positioning of items on tray 	<ul style="list-style-type: none"> • Uniforms are properly controlled

Table 4.1 (contd.)

	<ul style="list-style-type: none"> Teapot Tray 	<ul style="list-style-type: none"> Cleanliness Positioning of items on tray 	<ul style="list-style-type: none"> at daily briefing. Customer comments 	<ul style="list-style-type: none"> can be standardized in terms of gap between the items and their relative position No more than 2% times the dress is soiled Not more than M number of complaints 	<ul style="list-style-type: none"> Proper linen service by laundry department Inspection by supervisors
Time	<ul style="list-style-type: none"> Receiving phone call Passing information Carrying out next phase of service 	<ul style="list-style-type: none"> Delay Readiness of employees Promptness of service 	<ul style="list-style-type: none"> Automatic measurement for delay in receiving phone call Statistics for the no. of guests served in busy hours Attendance sheet of employees Surprise checking by the management Note of dissent by internal customer about the lack of readiness Complaints by guest 	<ul style="list-style-type: none"> Maximum number of rings before which call has to be answered Avg. time in providing particular service Maximum absenteeism allowed No. of times a internal customer complained No. of times external customer complained 	<ul style="list-style-type: none"> Providing adequate manpower Not allowing absenteeism
Procedures	<ul style="list-style-type: none"> Recording on card Preparation, preservation of tea Entering to guest room 	<ul style="list-style-type: none"> Correct Continuously followed 	<ul style="list-style-type: none"> Cross checking of duplicate slips. Customer comments about badly prepared tea Customer comments about wrong billing or unnecessary disturbance. Detected and reported by other employees 	<ul style="list-style-type: none"> Standards for the proper mix for tea preparation No. of times (percentage) wrong billing has been done No. of complaints 	<ul style="list-style-type: none"> Preparing standards for the mix Giving particular instruction for entry and exit from guest room Proper training thorough video recording and other gadgets to follow guest contact procedures Using control slips to record the transactions.

4.2 Analyzing Front Office Operation

The front office is responsible for almost all of the customer related activities (in addition to several hotel related activities). Typically, it performs customer related activities spanning from the time customer makes initial contact with the hotel to the time when he departs from the hotel - reservation, car pick up service, reception, registration, allotment of rooms, providing information, billing and check out formalities at the time of departure. Besides, it has a complementary role of image building because it is the first point and last point of contact for every guest

4.2.1 Guest Satisfaction Parameters

Guest satisfaction in front office operation primarily depends upon following factors.

- Access time should be less.
- Personnel should be courteous, dressed properly and behave in a dignified manner.
- Personnel should be able to communicate properly and helpful to the problems of customer.
- Customer should not face any un-foreseeable procedural problems.
- Information received by the guest should be correct.
- The environment in which registration and reception take place should be comfortable.

4.2.2 Describing the Service System

The IDEF0 diagram for the front office operation is shown in the Fig 4.3. The diagram is self explanatory. The service delivery process described in the diagram is based on the understanding of the information collected from several sources mentioned before.

4.2.3 Blueprinting the Service System

Based on the discussions presented in section 3.2, the blueprint for the service delivery process as shown in Fig 4.4 is developed by relating the guest satisfaction parameters to the stages of IDEF0 diagram (Fig. 4.3).

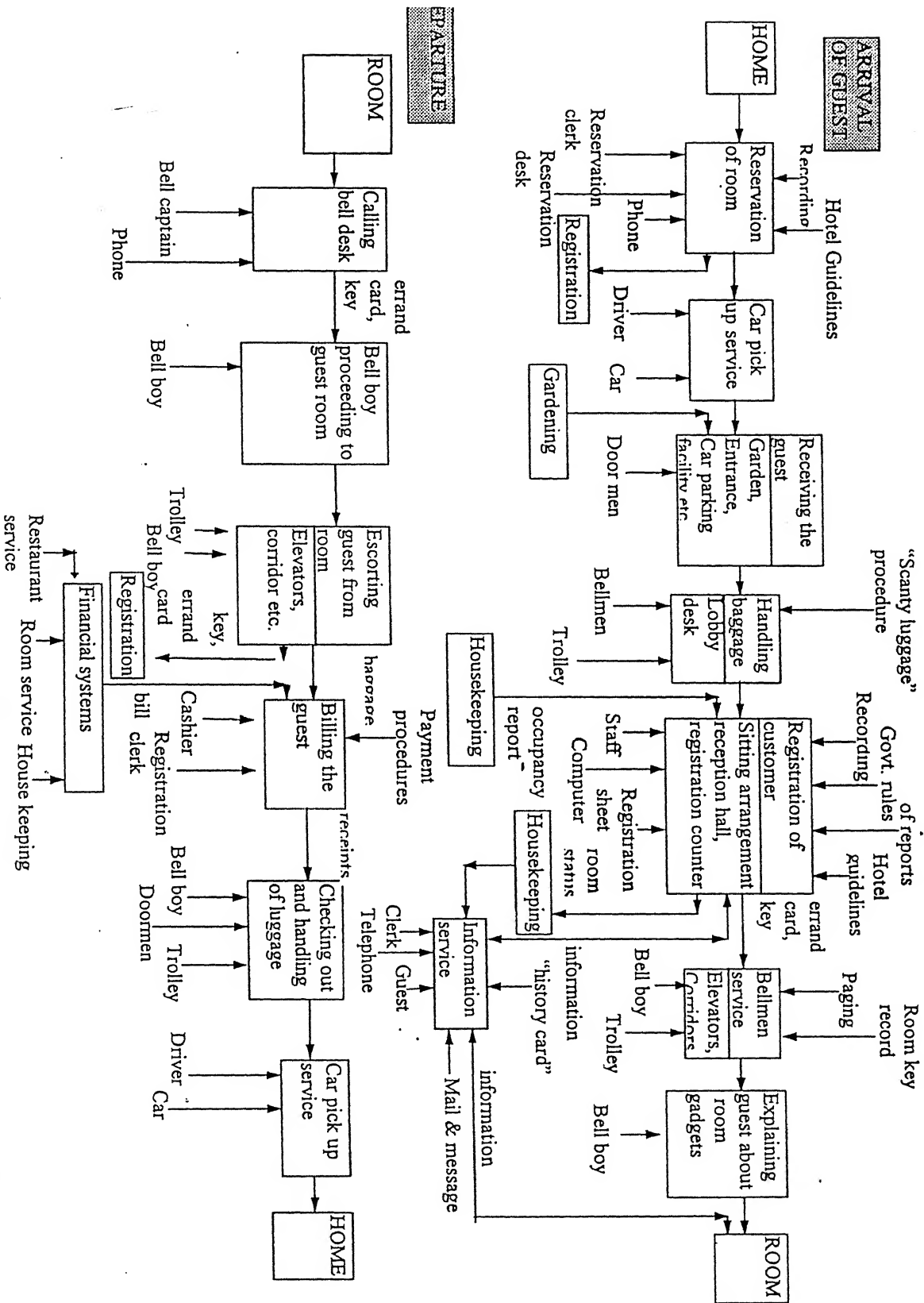


Fig. 4.3 : IDEF0 diagram for front office operation

4.2.4 Listing the Quality Elements of Service System

From the failpoints of the blueprint of Fig 4.4, the quality elements can be identified, as discussed in section 3.2. These quality elements are listed below, according to the stages of IDEF0 diagram they represent.

(i) Reservation of room

- Timeliness of answering reservation requests.
- Correctness of answering customer queries.
- Manner of answering phone calls.
- While handling phone calls, letting the caller to discontinue first.
- Regularity in updating reservation chart and rack.
- Completeness of collecting customer information.
- Promptness and correctness of recording customer information.
- Timeliness of passing the information about cancellation to other departments.

(ii) Car pick up service

- Timely arrival of car to pick up the guest.
- Easy access to the car.
- Reliability of operating condition of car.
- Interior condition of car for comfortability.
- Behavior of the driver.

(iii) Handling of Baggage

- Readiness of baggage handling trolley.
- Attractiveness of the trolley.
- Smooth functioning of the trolley.
- Design of the trolley to accommodate all belongings of a guest.
- Customer's belongings should not be damaged in anyway while handling the baggage.

(iii) Receiving the guest

- The entrance to hotel should be spacious and beautiful.
- It should have gardens, free of pollution and have an overall pleasant atmosphere.

- Its design and maintenance should reflect the standard of hotel.
- Gate keeper and guard should be prompt enough to receive the customer.
- They should wish the guest without fail.
- They should offer a helping hand to customer's immediate needs.
- Customer should not face any unpleasant disturbances on his arrival like special arrangement for VIP guests.
- The entrance gate to the reception hall should be beautifully decorated and kept clean.
- The entrance gate should give trouble-free function. Especially it should not generate any sound.
- Reception hall should be planned for comfortable sitting arrangement.
- Reception hall should be attractive and spacious interior.
- Free air, adequate light, slow music, frontal scenic beauty and other such attributes should be incorporated while designing reception hall.

(iv) Registration of guest

- The reception hall should be rationally convenient to let the guests feel at ease and relax.
- The lobby desk, registration counter and information counter should be aesthetically attractive and designed to have a closer access to customers.
- The personnel engaged at registration, information and lobby desks should be properly groomed.
- Personnel should always have a ready smile.
- Personnel should behave courteously.
- Correct and clear Communication of personnel.
- Customer grievances should be diplomatically handled.
- Customers should be helped readily.
- Staff should have adequate knowledge about other departments by the
- Every customer should be made to feel special. Tricks like calling by name, recalling a previous experience with customer, telling him about his favorite cuisine or other preferences, helps greatly to generate customer loyalty.

- Employees should act as salesman of hotel to encourage the customer to use more of the facilities that are available in the hotel.
- Updating room rack and other such works should be carried out sincerely and regularly.
- Allotment of rooms should be done according to the customer preferences and hotel guidelines.
- The paperwork like filling of registration cards preparing discrepancy reports should be done correctly and according to hotel guidelines.
- House keeping department should provide correct information about clear room status and room occupancy report. It should be regularly provided.
- The key of the rooms should be designed beautifully as it is handled by the guest.
- The room keys should be properly controlled.

(v) Information service

- Information about VIP guests should be passed to other departments without delay.
- Guest should be provided with adequate information about their interest.
- Information should be correct.
- Guest should be able to understand the information's clearly.

(vi) Bellmen service

- Bell boy should be ready and show enthusiasm to accompany customers to their room.
- Bell captain should be able to solve guest related problems efficiently.
- While escorting the guest to their room, the bell boy should be courteous enough and should not talk much. He should be try to be helping to customer's needs.
- Elevators should be attractive, fast and in perfect operating condition.

(vii) Explaining guest about room gadgets

- Bell boy should have sufficient knowledge about the functioning of different gadgets in the guest room.
- Bell boy should be able to communicate impressively while explaining the functioning of room gadgets to the new customers.
- Bell boy should report any help required by the guest to the concerned department promptly.

(vii) Calling bell desk and bell boy proceeding to guest room.

- The bellmen should be ready to respond to the call from room.
- The phone should work properly.
- Bellmen should answer the phone call promptly.
- The bell boy should be ready to go to the room immediately.
- Errand card and key should be promptly provided by the registration.
- Correct errand card and key should be provided.
- The trolley should be available.
- Elevator should function promptly.
- The bell boy should not be obstructed on the way by supervisors of other departments.
- Bell boy should not unnecessarily make delay by gossiping with other employees.
- Bell boy should enter the room with proper manners.

(viii) Escorting guest from room

- Bell boy should extend all necessary help needed by the guest.
- There should not be any type of disturbance while guest coming from room to the lobby.
- Guest should not feel rushed up in his departure.
- Employee should let the guest feel that hotel is grateful to have such a nice customer.

(ix) Billing the guest

- Housekeeping department should correctly inform if guest has to pay any extra charge.
- Room service and restaurant service should correctly and timely inform the bill incurred by the customer.
- Billing should be accurate.
- Bill should be prepared well before guest arrive at registration.
- The look of the bill should reflect the standard of hotel.
- Complaints about the wrong billing should be promptly solved by the staff.
- Staff should handle the complaints tactfully to avoid any bad-feeling by guest.

(x) Checking out

- Staff should thank the guest for his visit without fail.
- Guest should be invited for next visit.
- Staff should solicit guest reaction about the quality of service.
- Staff should promptly acknowledge any suggestion forwarded by the guest.
- While guest should offered voluntary help by the staff.

(xi) Handling of luggage and car pick up service

- The quality elements for this stage is same as the earlier stage of handling luggage and car pick up service.

4.2.5 Classifying Quality Elements

As discussed in section 3.3, it is imperative to classify and group the quality elements into different categories for developing measurement and quality mechanism for service system, because it is unworkable to discuss all elements individually. These can be classified as :

- Service encounter
- Service Environment
- Tangibles

Service encounter can further be divided as shown below.

Service encounter → Personnel → Interaction → Interpersonal skill to tackle problems

→ Manners

→ Communication ability

→ Capability → Carrying out tasks

→ Information regarding guests

→ Carrying out formalities → Access time

→ Procedures

4.2.6 Measurement and Control Mechanism for Front Office Operation

After classifying the quality elements to different categories, it is possible to develop measurement, control methods and standards for measurement, as discussed in the section 3.3. The scheme for Measurement and control mechanism for room service system is given in Table 4.2 according to the format proposed in Table 3.7. The methods discussed are collected from variety of sources as discussed in section 3.3.2.

Table 4.2 : Measurement and control mechanism for front office operation

Factors	Items	Critical parameters	Control methods	Measurement ways	Possible standards
Service Environment	<ul style="list-style-type: none"> Entrance, various counters and desks, reception hall, elevators and corridors 	<ul style="list-style-type: none"> Attractive, Convenient, Proper climate, Comfortable to access 	<ul style="list-style-type: none"> Proper design and planning Encourage employees to suggest innovations for decoration ghost shopping of other hotels Regular cleaning and maintenance 	<ul style="list-style-type: none"> Daily visual inspection by supervisors to find out possible defects Periodically measuring cleanliness by scientific method e.g. amount of reflection from brass components 	<ul style="list-style-type: none"> No. of customer complaints No of defects find out during inspection
Access time	<ul style="list-style-type: none"> Answering to reservation requests, Time for registration Promptness of guard receiving the customer from car, Time required for billing. 	<ul style="list-style-type: none"> Delay Readiness, Promptness 	<ul style="list-style-type: none"> Employing enough personnel Not allowing absenteeism Designing the work place so that access time will be less 	<ul style="list-style-type: none"> Automatic measurement of delay in receiving phone calls Finding statistics for the number of customer served in busy hour Checking by the supervisors to find out the readiness of personnel Note of dissent by internal customer Complaints and feedback from the customers 	<ul style="list-style-type: none"> Mean waiting time No of times employees are found to be not in ready position

Table 4.2 (contd.)

Information	<ul style="list-style-type: none"> • Billing of guest • Allotment of room • Answering to guest queries • Recording data related to customer. 	<ul style="list-style-type: none"> • Correctness • completeness 	<ul style="list-style-type: none"> • Immediate availability of guest folio printouts. • Using control cards and control sheets e.g. reservation form as shown in Fig. 4.5, message handling sheets. • Maintaining control cycles e.g. key control cycle (shown in Table 4.3) • Promptly writing down information. • Collecting printed materials to answer guest queries 	<ul style="list-style-type: none"> • Making random checks of control cards, sheets and comparing with actual position. • Customer complaints about the incorrect information e.g. no booking even with advanced reservations, car is not reaching at the right place. • Complaints by the internal customers 	<ul style="list-style-type: none"> • Number of complaints • Seriousness of complaints
Procedures	<ul style="list-style-type: none"> • Reservation • Registration • Billing, • Cancellation 	<ul style="list-style-type: none"> • Hassle free and prompt procedures, 	<ul style="list-style-type: none"> • Designing understandable processes. • Procedures should involve less no. of people. • Limiting the amount of writing done during a single service encounter. 	<ul style="list-style-type: none"> • Customer complaints. 	<ul style="list-style-type: none"> • No. of complaints and investment required to improve/modify the procedure
Tasks	<ul style="list-style-type: none"> • Filling the cards • Preparing reports • Updating sheets and 	<ul style="list-style-type: none"> • Regularly • correctly • efficiently 	<ul style="list-style-type: none"> • Creating internal controls like preparation of occupancy report to 	<ul style="list-style-type: none"> • Making inspection of particular sample of documents to find out 	<ul style="list-style-type: none"> • No. of times tasks are not

Table 4.2 (contd.)

	racks		cross check whether procedures are followed correctly	whether they are followed correctly	carried out correctly
			<ul style="list-style-type: none"> Emphasizing importance of critical points of mistake during training Selecting people with adequate skills e.g. writing while answering to call 	<ul style="list-style-type: none"> Making periodic checks to find out whether it is done regularly Regularly doing the balancing Note of dissent from internal customers 	<ul style="list-style-type: none"> The importance of the task
Tangibles	<ul style="list-style-type: none"> Car, trolley, placards, key, racks 	<ul style="list-style-type: none"> convenient look cleanliness 	<ul style="list-style-type: none"> Proper designing or Purchasing quality products. Empowering employees to discard the products. 	<ul style="list-style-type: none"> Visual inspection by supervisor Periodically checking a sample of items Asking customer to give their opinion 	<ul style="list-style-type: none"> A scale of rating to find out the quality and discarding all materials below an average value.
Interpersonal skills	<ul style="list-style-type: none"> Handling reservation requests Dealing with the problems related to registration, billing, car pick up service Answering registration queries 	<ul style="list-style-type: none"> Efficiently handling explosive situations. Not getting provoked easily. Creating confidence in customers. 	<ul style="list-style-type: none"> Strict selection method. Employing enough manpower to avoid fatigue. Adopting behavioral performance measures. 	<ul style="list-style-type: none"> Number of customer related problems that are not solved by the immediate employees and comes to higher level. Customer complaints about the bad treatment he come across. Asking feedback from 	<ul style="list-style-type: none"> No. and complexity of problems. No. and seriousness of complaints. Devising a scoring system.

ble 4.2 (contd.)

				<ul style="list-style-type: none">regular customers.The incidents that come to the notice of other employees	
Manners	<ul style="list-style-type: none">While escorting customer to room.Handling phone calls, receiving customers, registering and other such encounters	<ul style="list-style-type: none">Welcoming manner of greetingSmiling faceWarm wishStrong handshakeStanding straightTelephone manners	<ul style="list-style-type: none">Skill enhancement trainingGiving feedback about faults through video recordingAdopting behavioral performance measures	<ul style="list-style-type: none">Guest comment.Attitude survey by external agencyVideo recording service encounters	<ul style="list-style-type: none">Total no. of guest comments for a periodRanking by the agency.Number of faults allowed per person
Communication	<ul style="list-style-type: none">Reservation, providing information, making registration etc.	<ul style="list-style-type: none">No language problem.A sense of humorQuick to understand the problemsAbility to explain clearly and perfectly	<ul style="list-style-type: none">Strict selection methodAdopting behavioral performance measures.Giving specific instructions for using different phrases to commonly encountered situations	<ul style="list-style-type: none">Making fake phone calls to ascertain communication abilityAttitude survey by external agencyCustomer commentsCommunicating directly with employees to ascertain their ability	<ul style="list-style-type: none">Level of communication abilityRanking by agency.Number of times it is not responded properly

Fig 4.5 : A sample reservation form

Surname:	First name:	Address:	
Will arrive	Date:	Hour Flight A.M. P.M.	Departure Date: Time:
Accommodations and rate desired Single: Double: Twin: Suite:			
<u>Remarks and billing instructions</u>			
Credit:		<input type="checkbox"/> Phone no.	<input type="checkbox"/> Verbal by
Requested by	Received by	Date:	

Table 4.3 : Key control cycle to control the key of guest room

Step1	Instruct guest to leave key at key slot only.
Step2	Always keep a heavy key tag.
Step3	Keep and mail rack to be placed below the counters and not on the wall.
Step4	Duplicate keys to be used & issued by authorized persons only.
Step5	Extra room key to be provided on special request only.
Step6	Housekeeping & other departments to return all lost keys
Step7	Keep keys in safe place.
Step8	Issue key on display of key card.

4.3 Analyzing Restaurant Service System

A restaurant is a commercial establishment committed to the sale of food and beverage which may be a licensed part of the hotel operation, whereby sales of the restaurant contribute to the sales performance of the hotel as a whole. Basically a restaurant provides tables and chairs for people to sit and eat food prepared by an attached kitchen. They are equipped with crockery, cutlery and linen, which may vary in quality according to the standard of restaurant, which is determined by its decor, independent bar, entertainment facilities and above all, the quality of service.

The restaurant service of a hotel constitutes all the activities that are associated with offering food to customers. The complete service delivery process of a restaurant spans across vast areas of activities like providing information about restaurants to guests, forecasting the food and beverage requirement, purchasing and receiving materials, carrying the food from kitchen to the dining table preparing check and receiving payment. The details of the activities are described through IDEF0 diagram.

4.3.1 Guest Satisfaction Parameters

The guest satisfaction from a restaurant service primarily depends upon :

- Food should be well prepared.
- Guest should feel relaxed while dining in the restaurant.
- Personnel should behave with proper manners.
- The decor and climate of restaurant should be impressive enough.
- Dining hall should be well maintained.
- The service should be fast.
- The cost of food should be justifiable.

4.3.2 Describing the Service System

The IDEF0 diagram for the room service is shown in the Fig 4.6. The diagram is self explanatory. The service delivery process described in the diagram is based on the understanding of the information collected from several sources mentioned before.

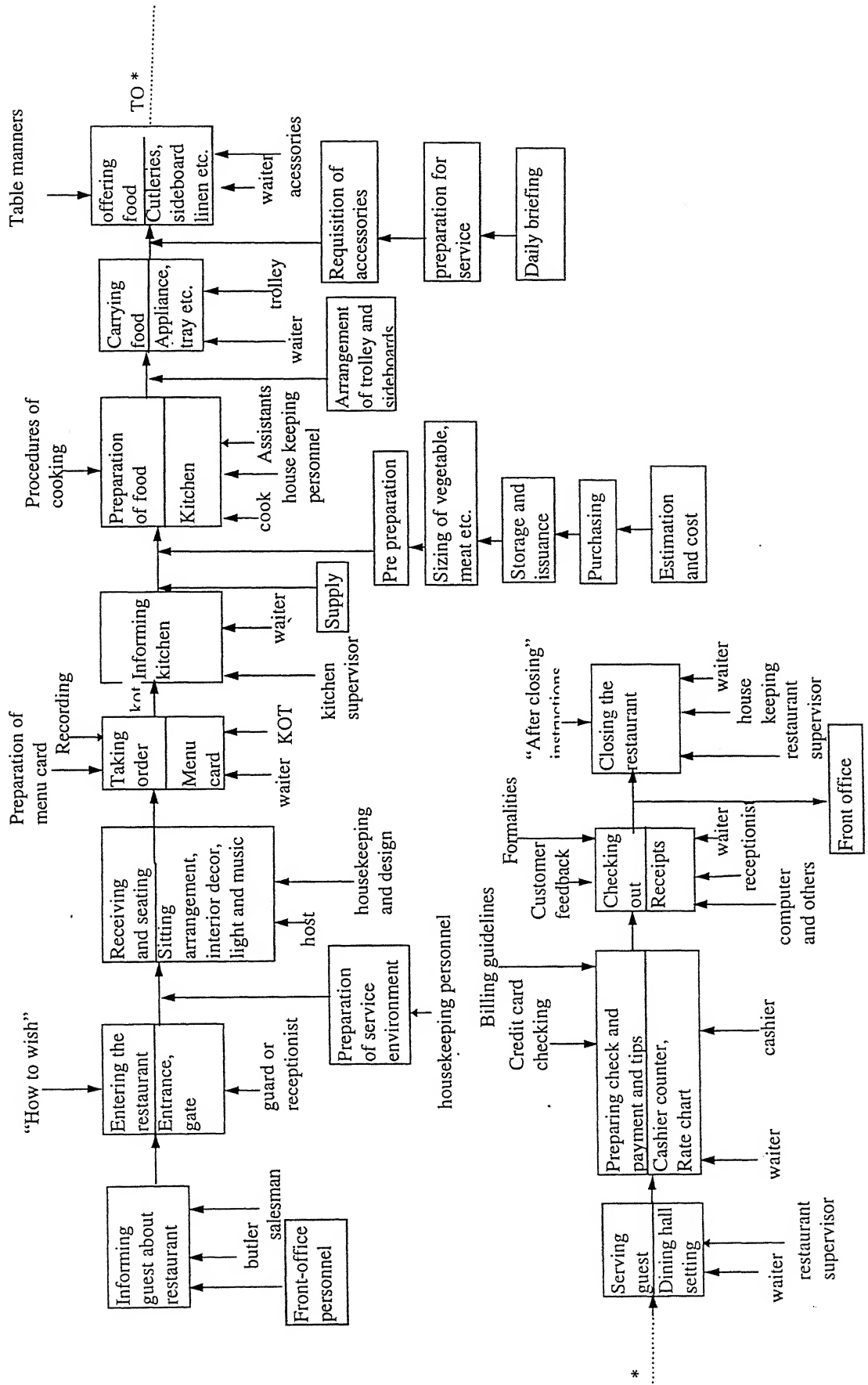


Fig. 4.6 : IDEFO diagram for restaurant service

4.3.3 Blueprinting the Service System

Based on the discussions presented in section 3.2, the blueprint for the service delivery process as shown in Fig 4.7 is developed by relating the guest satisfaction parameters to the stages of IDEF0 diagram (Fig. 4.6).

4.3.4 Listing the Quality Elements of Service System

From the failpoints of the blueprint of Fig 4.7, the quality elements can be identified, as discussed in section 3.2. These quality elements are listed below, according to the stages of IDEF0 diagram they represent.

(i) Informing the guest about restaurant

- Adequate and correct information should be provided to the customers.
- Variety of food and the special cuisine available should be communicated to the customer contact employees so that they can pass it to others.

(ii) Entering the restaurant

- The entrance to restaurant should be decorated well.
- Receptionist should be present at the entrance to wish and help the customer.
- should be available to escort the guest.
- Host or hostess should walk at the pace of customers while escorting him to the table.

(iii) Preparation of service environment

- The dining room should be well-prepared to before the arrival of guest.
- The-climate of restaurant should be pleasant.
- The restaurant should be spacious.
- The decor of restaurant should be impressive.
- The hygiene of restaurant should be maintained.
- The carpets are well brushed and hovered.
- Dirty linens are exchanged for fresh linens.
- Flowers, table cloth, tent cards and other materials should be perfectly arranged.
- Table lights, wall lights, music system, air-conditioning are functioning faultlessly.
- The intensity of light, music should be right enough to create a soothing atmosphere.

(iv) Receiving and seating

- Tables and chairs are serviceable and positioned correctly.

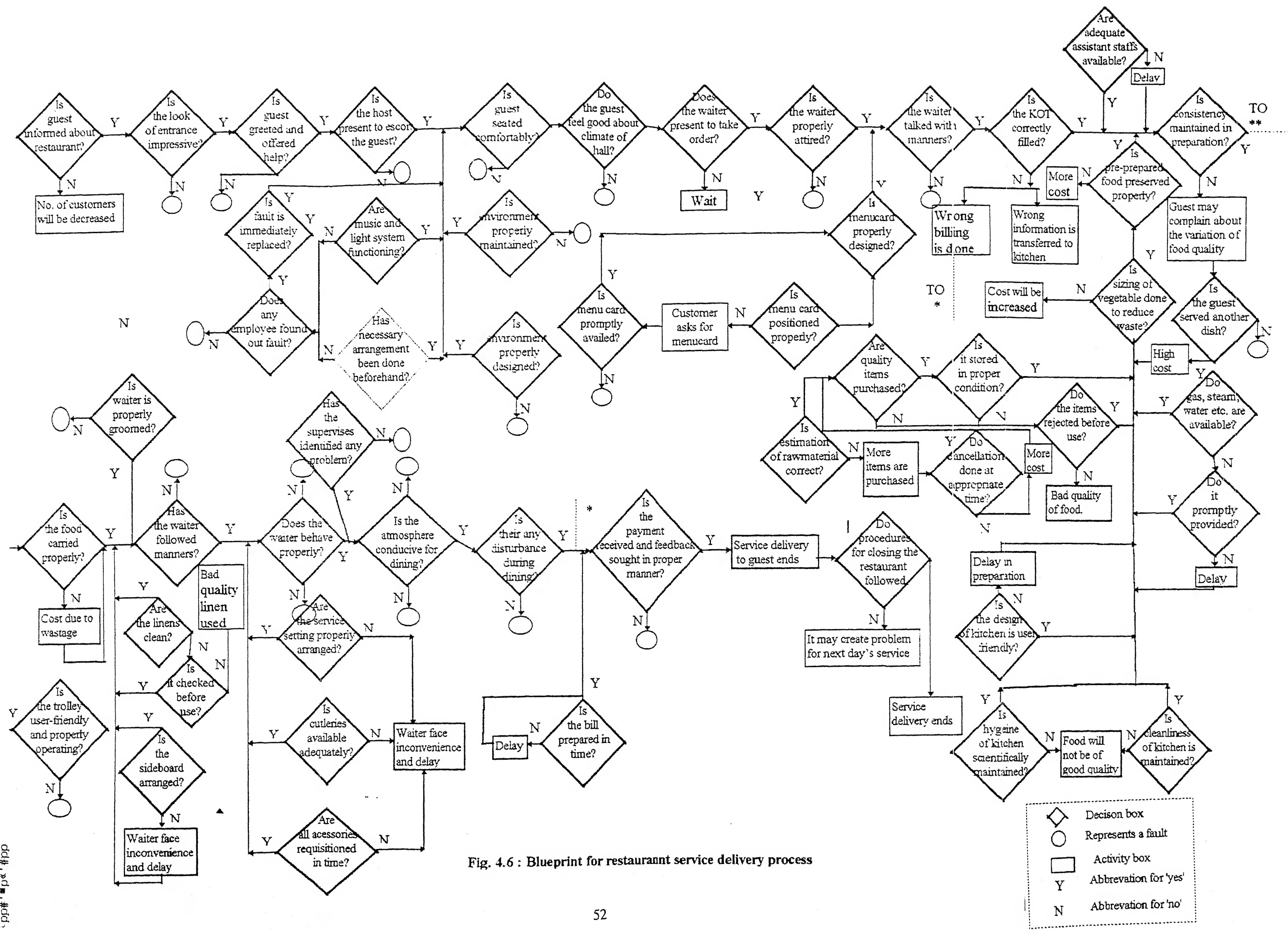


Fig. 4.6 : Blueprint for restaurant service delivery process

- These height shape and other physical features of chair and table should be comfortable to customers.
- Host and hostess should help the guest seat comfortably.
- Host and hostess should follow the correct manners while dealing with lady guests.
- The host should help control the flow of seating customers evenly through the sections and staggered times.
- He should effectively communicate seating and other needs effectively.

(V) Taking order

- Waiters should be properly attired.
- They should be properly groomed like using mild makeup and arranging hairs.
- Adequate attention should be given to hygiene and sanitation e.g. nails are cut, shoes are polished.
- Menu card should be positioned rightly. It should be attractive, informative and easy to understand.
- Menu items should astronomically sound as it reflects a high standard of service. The list of items should be logically sequenced.
- The order from guest should be taken down clearly and precisely.
- While taking order it is prudent to allow the guest some time to decide. Polite suggestions should be given for helping the guest to decide about menu. But guest should not feel being forced directly or indirectly to choose any particular cuisine.
- The waiter should have adequate knowledge about the preparation and final presentation of dishes.
- He should be able to answer customer's queries without any communication problem.

(vi) Informing kitchen

- Kitchen order ticket(KOT) should be correctly filled.
- KOT should be small and beautiful as guest may look at the KOT of restaurant and compare it with that of other hotel.
- Close access to kitchen from restaurant.

(vii) Estimation, purchase, storage and other activities required for food preparation

- Front office should provide a correct record of occupancy. It will help to keep inventory of food items at a minimum level.
- People going for purchasing should be correctly briefed about the quantity.
- Excess purchase orders should be canceled as soon as possible to avoid wastage.
- Vegetables purchased should be fresh.
- Meat should be purchased according to specification.
- The spices and other items should be of reputed quality.
- Storage place should be conducive to keep vegetables and other items in proper condition. Strict control should be followed for issuance.
- Supply of water, electricity should be uninterrupted.
- Pre-prepared food should be properly preserved and its quantity should be controlled.

(viii) Preparation of food

- Adequate staff should be available to assist the cook.
- The main cook should be adequately trained.
- Reliability and consistency should be primary criteria in the preparation of food.
- The dish should be tasted equally served to different customers.
- Kitchen should be kept adequately cleaned like the main dining room of restaurant.
- The hygiene of kitchen should be scientifically controlled.
- The kitchen should be designed to make it user-friendly for speedy service.

(ix) Carrying the food

- Trolley in which food is carried to the restaurant should be decorated and maintained properly.
- It should be user-friendly and don't make any kind of disturbance while moving.
- Appliances and trays should be attractive and well maintained.
- There should not be any rush while carrying the food.
- Spoilage of food should be avoided.

(x) Preparation for service

- At briefing, the non-availability of food and beverages items are communicated to waiters. Besides waiters are informed about VIP guest, price increase, important functions etc.

- Waiters should be equipped with all the accessories required to serve like clean handkerchiefs, bottle openers etc.
- Adequate number of cutleries should be available with the waiter before service starts.
- Before the service starts, sideboard should be arranged properly.
- It should be positioned correctly so that it is easily accessible.
- It should be decorated beautifully which ensures the standard of service.
- All the detailed items on the sideboard should be available.

(xi) Offering food

- While offering food on the table manners should be properly followed. These are
 1. Holding service spoons and fork.
 2. Carrying a tray
 3. Laying a table cloth
 4. Changing a table cloth during service
- Clearing soiled plates from table
- Food should be served according to the courses.
- While serving it is advisable to address customers by his name.
- Adequate amount of fresh linens should be available.
- The cleanliness of linens should never be compromised.

(xii) Serving guest

- The climate of restaurant should be such that the customers should feel relaxed.
- Occasional requests from customers should be attended to immediately.
- No table should be left without cover (atleast one waiter is assigned).
- It is very important that waiter should have an attitude to serve people and an interest to develop cordial behavior with all types of customers.
- Waiters should never ignore guest even if he is entitled to serve other customers.
- Waiters should avoid conversing between themselves in the dining hall.
- Sneezing and coughing should be avoided.
- Disturbance by irate customers should be controlled properly and timely.

(xiii) Preparation and payment of check

- Always present the check correctly calculated.

- The delay in preparing should be avoided.
- The look of the check should reflect the standard of hotel.
- Keep the check at the side of the station when guest are nearing the end of their meal.
- Always acknowledge the tips. But cadging for tips or jingling coins in pockets should be avoided.

(xix) Checking out

- Forgetting to say “thank you” or failing to go through other formalities to let the guest feel that the restaurant is grateful to have the customer as the guest.
- If the guest make any suggestions for improvement, it should be acknowledged promptly

(xx) Closing the restaurant

- While closing the restaurant all soiled dishes, dirty linens should be removed.
- All electrical equipment’s should be switched off.
- Inventories are checked for the next days purchasing.
- Side-stands and other such items should be locked or kept at safer position.
- Finally, the entire area should be cleaned and dusted so as to eliminate the remains of the previous sittings.

4.3.5 Categorizing Quality Elements

As discussed in section 3.3, it is imperative to classify and group the quality elements into different categories for developing measurement and quality mechanism for service system, because it is unworkable to discuss all elements individually. These can be classified as :

- Quality of food
- Ability of personnel
- Physical features of restaurant
- Service time

They can be further divided as shown below .

Quality of food → Quality of food material

→ Food preparation

→ Kitchen condition

Ability of personnel → Technical skill for carrying out tasks.

→ Behavior of personnel while interacting with customers.

Physical features of restaurant service → Service settings e.g. side boards, tables & chairs.

→ Service environment e.g. interior decor, climate of restaurant etc.

4.3.6 Measurement and Control Mechanism for Restaurant Service System

After classifying the quality elements to different categories, it is possible to develop measurement, control methods and standards for measurement, as discussed in the section 3.3. The scheme for Measurement and control mechanism for restaurant service system is given in Table 4.4 according to the format proposed in Table 3.7. The methods discussed are collected from variety of sources as discussed in section 3.3.2.

Table 4.4 : Measurement and control mechanisms for restaurant service

Factors	Items	Critical parameters	Control methods	Possible measurement ways	Possible standards
Food material	Vegetable, meat, spice	Freshness, quality, cost control	<ul style="list-style-type: none"> Purchasing daily. Preparing detailed purchasing specifications for particular items. Keeping a low inventory of items, Keeping the purchased items in a perfect storage condition. 	<ul style="list-style-type: none"> Assessing the freshness, shape and size of material by the purchasing personnel. Complaints during sizing or preparation of food by the internal customers. Inventory of material from record. Calculating the ratio between purchasing bill to the total billing in the restaurant. 	<ul style="list-style-type: none"> An average value the freshness of vegetables purchased. Number of complaints. The average inventory as a percentage of total consumption per The minimum value of ratio.
Food preparation.	Preparation, storage, testing	Authentic preparation and properly tested, Procedures are followed properly. easy and less time consuming	<ul style="list-style-type: none"> Written procedures are prepared to guide the personnel. Charts, posters and other such aids are made available to be followed whenever there is a difficulty in preparation. Issuing clear guidelines and empowering personnel for rejecting the badly prepared items. 	<ul style="list-style-type: none"> Complaints and comments by the customer. Assessing seriousness of customer complaints. Periodic checking to find out whether the items to be served to guest are properly followed. 	<ul style="list-style-type: none"> On an average customer response should be positive - 25% no comments- 60% negative - 15% The seriousness score can be multiplied with the no. of negative responses to find score for a fixed period.

Table 4.4 (contd.)

					<ul style="list-style-type: none">• Not more than 5 cases in a month where wrongly prepared food is served.
Kitchen condition	Kitchen place, equipment.	Hygienic, easy to use, cleanliness.	<ul style="list-style-type: none">• Proper design of work place easy and less movement during preparation of food.• Proper light and ventilation.• Designing see through kitchen for better maintenance of kitchen place.• Extensive use of methods for hygienic control of kitchen.• Getting feedback from the cook and other users before purchasing equipment.	<ul style="list-style-type: none">• Measurement of bacteria culture in the walls of kitchen.• Measuring the average time required for preparation of food for a fixed number of guests.• Note of dissent by the cook and other internal customers for the improper maintenance of kitchen.	<ul style="list-style-type: none">• Internationally accepted standard• Deciding the permissible limit & expected average time.• Not more than 4 dissents per month
Technical skill	Preparing and testing food by the cook, Changing the table cloths in presence of guest, recording on KOT, supervision skill by supervisor.	Adequate skill, correct skill, always followed.	<ul style="list-style-type: none">• Extensive training.• Daily briefing at the start of shift.• Describing clearly sequence of steps clearly as shown in Table 4.3.1.• Giving regular feedback about the common faults.• Giving rewards for better than average skills.	<ul style="list-style-type: none">• Assessing the skills periodically through service excellence classes.• Conducting in-house surveys to find level of employee adaptability in role playing.• Getting feedback from other employees.	<ul style="list-style-type: none">• Minimum scores• skill assessment : employee adaptability.• Minimum no. of employees giving positive assessment
Behavior of personnel	Host, receptionist, waiter.	Courteous, Proper communication and manners,	<ul style="list-style-type: none">• Strict selection methods to assess the communication ability and the willingness of candidates to serve other people.• Giving specific instructions e.g. how to	<ul style="list-style-type: none">• Customer comments about the unsatisfactory behavior.• Assessing the seriousness of complaints.	<ul style="list-style-type: none">• Number of times particular employee is appreciated.• Number of fault employee.

Table 4.4 (contd.)

		alert to customer need.	talk while receiving payments or asking for orders.	Visual inspection by the supervisor.	Average level of satisfaction.
			<ul style="list-style-type: none"> Graphical display of the physical postures. Giving opportunity to observe personnel in working condition. Appreciating employees on positive customer response and giving it wide publicity. 	<ul style="list-style-type: none"> Video recording the activities of waiters to find out faults. Surveys to find out employee satisfaction. Rating by attitude agency. 	<ul style="list-style-type: none"> Minimum score of agency. No. of complaint weighted with seriousness of complaints for finding minimum score.
Service setting	Table and chairs, Side boards, Flower pots	Proper positioning, Suitable size and shape, Cleanliness, attractive look	<ul style="list-style-type: none"> Sufficient planning before designing. Periodic maintenance for keeping in proper condition which can be used. Housekeeping should be done daily sufficiently before and after the service. Checking by the restaurant supervisor before and after the restaurant is opened for service and making necessary modifications. 	<ul style="list-style-type: none"> Feedback from waiters about the difficulty they face during service. Keeping a record on the unnecessary movement is correct the faulty setting. Inspection by the supervisor during service to find out faults in the setting. Customer complaints. 	<ul style="list-style-type: none"> Number and seriousness of wa complaints. Average no. of fa per day that can t allowed. Number of complaints.
Usable	Trays, cutleries, spoons, linens etc.	Properly arranged for easy use. Always available. Cleanliness, Shape and look of usables	<ul style="list-style-type: none"> Preparing a checklist and adhering to it while arranging usable in their position. Devising a standard of doing things so as to forget nothing. Graphically displaying on kitchen walls to make the employees about its importance e.g. the food items on a tray before it is served table. Preparing specific purchase specifications with consulting everyone involved. 	<ul style="list-style-type: none"> Note of dissent about the non-availability of the items in their position. Customer comments about cleanliness and look of the usables. Supervisor keeping a eye on unnecessary movements during service. 	<ul style="list-style-type: none"> Number of disse for month. Number of custc comments. Amount of unnecessary movement.

Table 4.4 (contd.)

Service environment	Interior climate Entrance to dining hall, Floor carpets, side walls etc.	Spacious, decor, cleanliness, adequate ventilation, proper light, soothing music etc.	<ul style="list-style-type: none"> • Proper design taking into account the customer preferences through surveys and ghost shopping. • Continuous modifications with the changing lifestyle of people. • A system which takes care of defective light, music appliances, broken window panels or other such items. 	<ul style="list-style-type: none"> • Attitude survey by external agency. • Soliciting suggestions from customers and specifically from regular customers. • Allowing the employees to comment upon the present features and suggest suitable alternatives. • Assessing cleanliness through a checklist by the supervisor. • Note of dissent about the cleanliness by the users of dining hall. 	<ul style="list-style-type: none"> • Number of suggestions should not exceed a permissible limit. • The no. and seriousness of nonconformity for cleanliness should be multiplied and the average score should have a limit.
Service time	Time elapsed before taking order, time required for preparing food, time to inform the kitchen after order is taken, response time of waiters to the need of customer.	Delay, readiness.	<ul style="list-style-type: none"> • Employing enough personnel. • Designing the work place so that access time will be less e.g. the sideboard should be placed in such a position that the maximum distance to any dining table will be minimum. 	<ul style="list-style-type: none"> • Recording the number of people served during rush hour. • The time for which waiters are not busy in a given day. • Supervisor can find out the number of times a customer is not attended for his immediate request. 	<ul style="list-style-type: none"> • Standard time developed for each of the activities of the preparation for each of the cuisine.

Table 4.5 : Manner of 'changing a tablecloth' during service in presence of customer (Andrew, 1982)

Sequen ce no.	Left hand	Right hand	Eyesight	Remarks/Diagrams
1	Hold fresh table cloth	Hold fresh table cloth	Look for any stains on the cloth	Open out a fresh table cloth away from guest
2	Hold one tip of table cloth face upwards, with thumb and first finger.	Hold other tip on same side of table cloth, face upwards, with thumb and first finger.	See that tablecloth does not go into face of the guest.	Hold loose end of fresh table cloth well above far end of table and drop over edge 4" above ground
3	Hold far left corner of soiled tablecloth with second and third fingers and base of palm.	Hold far right corner of table cloth with second and third fingers and base of palm.	Align near end of fresh tablecloth and far end of soiled tablecloth	Pull both tablecloth spreading fresh tablecloth across table and simultaneously folding in the soiled cloth.
4	release fresh tablecloth over near edge of table. Keep holding soiled tablecloth till it slips off the table from under the fresh tablecloth	Release fresh tablecloth over near edge of table. Keep holding soiled tablecloth till it slips off the table from under the fresh tablecloth	see that soiled tablecloth does not fall into the guest's lap.	
5				Drop soiled table cloth on floor
6	With palms facing downwards in contact with tablecloth, smoothen out rumples in concentric circles moving from inwards to outwards	with palm facing downwards in contact with tablecloth, smoothen out rumples in concentric circles moving from inwards to outwards		
7				Pick up soiled tablecloth and take to station

4.4 Guest Room

Guest lives significant portion of his hotel stay in the guest room. Hence, his judgement of quality of hotel service is highly influenced by the experience of guest room. No amount of quality service in front office or restaurant service can satisfy a guest if he develops a dislike for the type of guest room, he is being provided with. Quality of a guest room depends upon two aspects :

1. **The design of guest room.**
2. **The upkeeping of guest room.**

Design and upkeeping are completely two different type of activities. The nature of service delivery system is also different. Consequently, analysis of guest room is described in two sections - design of a room and upkeeping of a room.

4.4.1 Guest Room Upkeeping

The largest number of guest complaints originate due to the defective way of housekeeping. This shows that other service processes are easier to control where as proper housekeeping remains a problematic area. This is because, the process of housekeeping by nature is different from other service processes. The factors which makes the upkeeping of a room quite different from that of other services are summarized below.

- This is a routine and highly repetitive job.
- Number of activities that has to be accomplished for housekeeping a single room are numerous. An eye for details is very important. For example even a small activity like daily maintenance of a T.V. set constitutes several steps as shown in Table 4.6 below.

Table 4.6 : A typical procedure for daily maintenance of TV sets.

Steps	Procedures to be carried out
1	Remove a plug.
2	Move the set.
3	Dust all over.
4	Use damp cloth to clean the screen.
5	Report frayed flexes and other defects.
6	Leave the set unplugged.

- The cleaning of room has to be done in a methodical way so as to cover all the areas of a room.
- Guest contact is minimal. Guest experiences the output of service delivery - properly maintained guest room, after the the process of housekeeping is completed.

4.4.1.1 Guest Satisfaction Parameters

As already discussed, output of the service process is not an employee customer encounter. Rather, encounter takes place between the room and guest. Hence, the satisfaction of customer depends on the outcome from this contact rather than the contact between housekeeping and guest. Situation resembles a manufacturing type situation. The product is made and customer receives that product. Here, housekeeping produces a quality room and customer receives that room. Thus, customer satisfaction is indirectly related to the operation of service delivery system. Nonetheless, the customer satisfaction parameters constitute those parameters which affect the outcome of the contact between guest room and its occupant. Following is a list of guest satisfaction parameters

- Minimisation of guest disturbance.
- Replenishment of all the guest supplies.
- Quality of guest supplies.
- Proper arrangement of supplies/particulars of guest room.
- Defect free operation of facilities.
- Cleanliness of room.
- Security and safety.

4.4.1.2 Describing the Service System

The IDEFO diagram for the guest room upkeeping is shown in the Fig 4.8. The diagram is self explanatory. The service delivery process described in the diagram is based on the understanding of the information collected from several sources mentioned before.

4.4.1.3 Blueprinting the Service System

Based on the discussions presented in section 3.2, the blueprint for the service delivery process as shown in Fig 4.9 is developed by relating the guest satisfaction parameters to the stages of IDEFO diagram (Fig. 4.8).

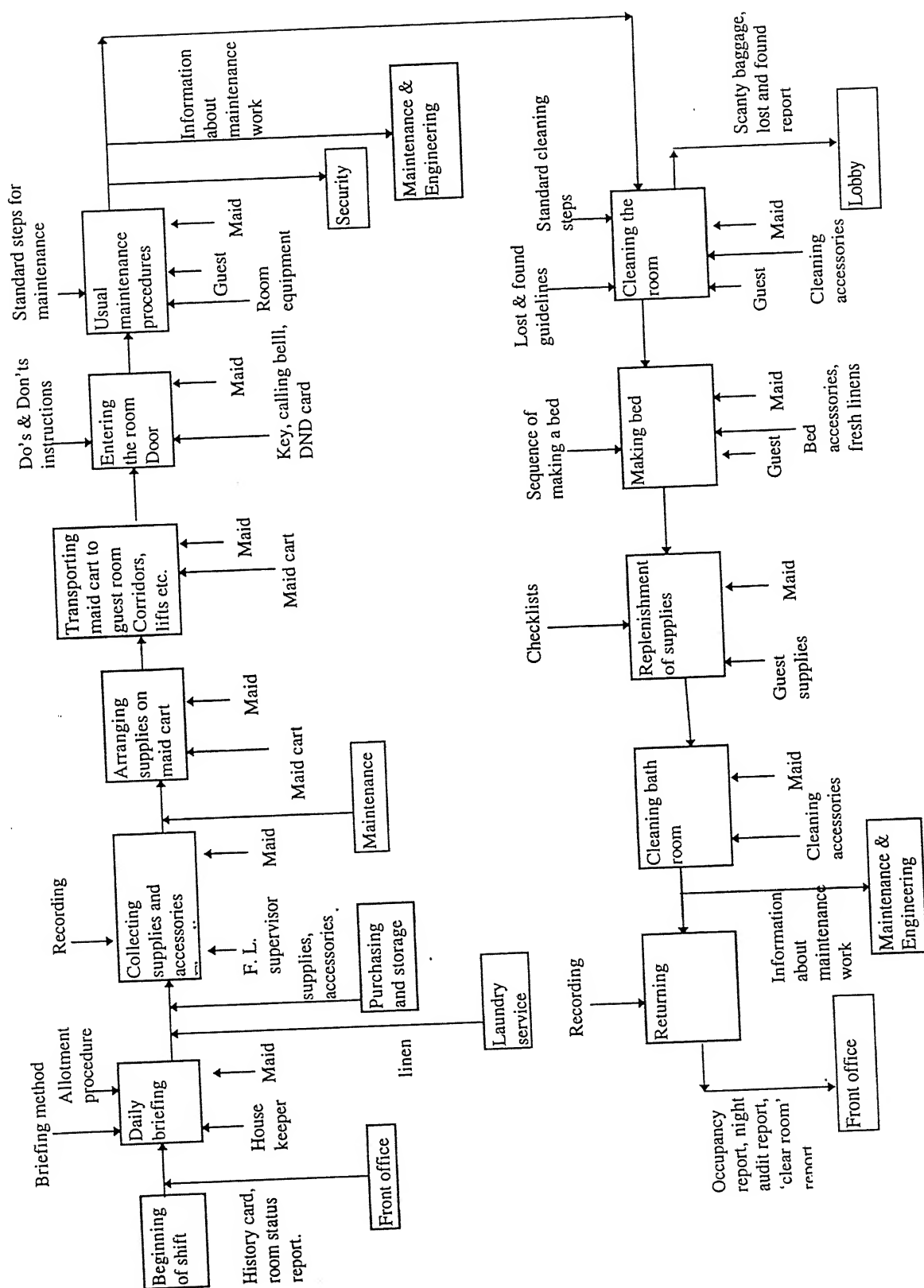


Fig 4.8 : IDEF0 diagram for guest room

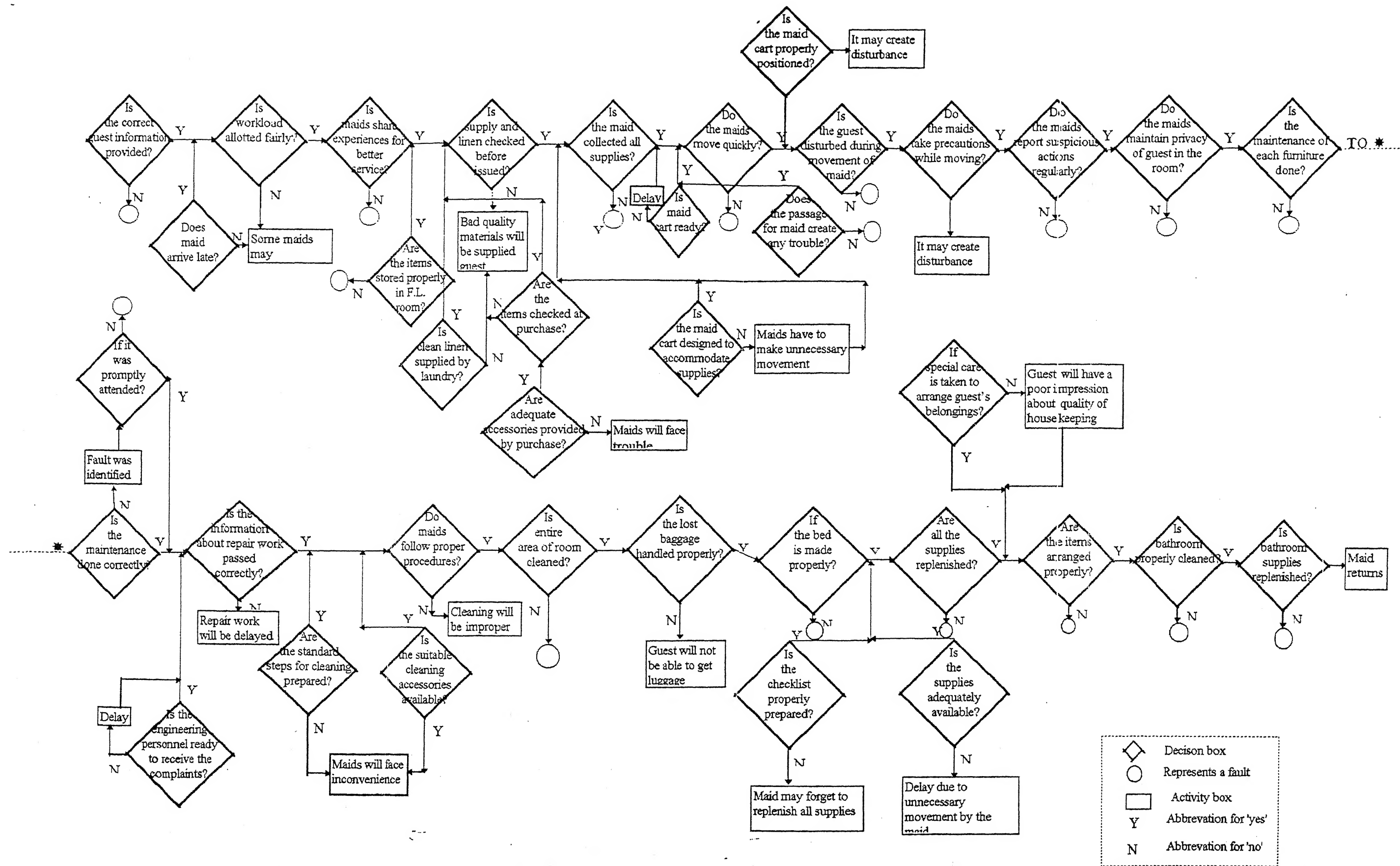


Fig. 4.9 : Blueprint for the guest room upkeeping process

4.4.1.5 List of Quality Elements for Guestroom Upkeeping

From the failpoints of the blueprint of Fig 4.9, the quality elements can be identified, as discussed in section 3.2. These quality elements are listed below, according to the stages of IDEF0 diagram they represent.

(i) Receiving guest related information from front office

- Information received about guests should be correct.
- Information should be received in time.
- Information should be made available regularly.

(ii) Daily briefing

- Maids should arrive in time.
- Rooms should be allotted in proper proportion so that no one is overloaded.
- Information about guest is properly circulated to maids.
- The personal experiences of maids should be shared to improve the service.

(iii) Collecting supplies and accessories

- Supplies and accessories should be provided adequately by the purchase.
- Quality of suppliers, accessories, linens should be checked at purchase.
- Fresh linens from the laundry should be available adequately and in time.
- Fresh linens should be properly cleaned by laundry.
- Cleanliness should be checked before issuing it to the maid
- Procedure for collecting linens should be short and consume less time.

(iv) Arranging supplies on maid cart

- Configuration of maid cart should be designed for correct arrangement of supplies.
- It should be designed for easy pick-up.
- Maids should not forget to collect any supplies.

(v) Transporting maid cart to guest room

- Maid cart should not be in out of order condition.
- Floor rooms should be near to guest rooms.
- The corridors for passage should be in proper condition.
- The elevators should operate smoothly.
- Maids should move in such a way so as to keep the total movement minimum.
- Unnecessary movement on guest floor should be avoided.

- Movement of trollies should not create any disturbing sound.
- Correct positioning of maid cart outside guest room.
- Staffs should not talk to each other outside the guest room or in corridors.
- Remaining alert to anything suspicious about guest movements.

(vi) Entering the room

- Entering wrong rooms should be avoided.
- Rooms should be prioritised correctly so that important room is cleaned first.
- Maids should knock the door while entering room.
- Do's and don'ts instructions are properly followed.
- The tools like key, DND card, calling bell should be available and in operating condition.

(vii) Carrying out usual maintenance procedures

- If the guest is inside the room or he returns from outside, permission should be taken to continue housekeeping activities in his presence.
- Disturbance to guests should be minimum to carry out maintenance of room.
- Maintenance procedures should be followed in a systematic way.
- Daily maintenance for each and every fixtures and furnitures should be done properly.
- Maintenance should be done in correct way.
- Special activities related to personal desire of guest should be carried out.
- Guest's baggages should be kept safe.

(vii) Providing information

- Information about maintenance work should be provided to engineering department regularly.
- Information should be correct and include everything that is needed.
- The personnel from engineering department should be ready to receive the message from maids.

(viii) Cleaning a room

- All the standard steps of cleaning should be prepared and carried out.
- Modern cleaning accessories should be provided.
- Cleaning accessories should be adequately available.
- Adequate and proper cleaning procedures should be followed by the maid.

- Allround cleaning of guest room e.g. carpets, window screen, underneath of bed, cleaning of wall should be carried out daily.
- Maid should keep an eye on details.
- Special attention should be given to unaccessible areas e.g. the top of cup board, corners.
- Any belongings of guest should be promptly referres to lobby.
- The procedures for 'lost and found' should be followed correctly.

(ix) Making a bed

- Making of bed should be done daily.
- Fresh linens should be used.
- Making a bed should be done in a proper manner.
- The movable items should be arranged properly.

(x) Replishment of supplies

- Quality of supplies should be checked before use.
- The cleanliness of linens used should be checked before use.
- Maids should be empowered to reject the bad quality material.
- All guest supplies has to be replinshed adequately.
- The movable items of room should be arranged properly.
- Arrangement of personal belongings of guests should be done keeping in mind the personal preferances.

(xi) Cleaning a bathroom

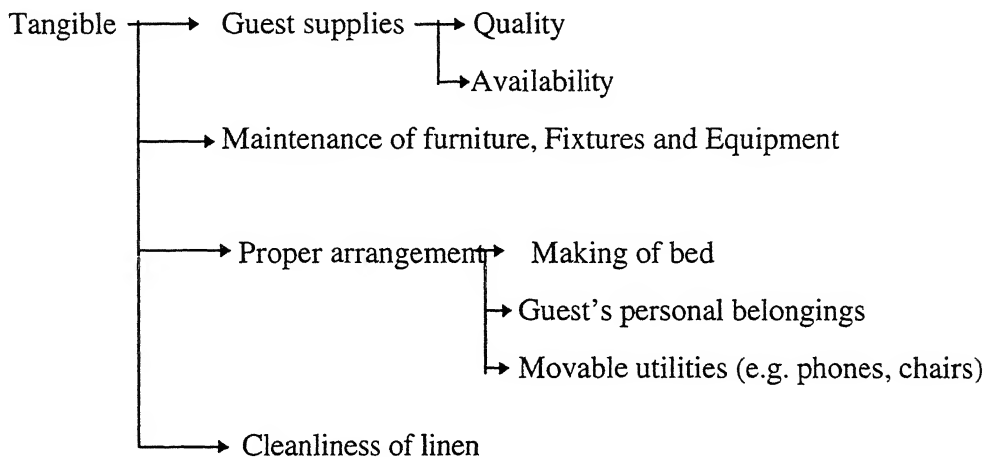
- The areas of bathroom should be cleaned in asystematic way one after another in a systematic way.
- Bathroom supplies should be replinshed daily.
- The information regarding maintenance should be passed on to maintenance department regularly.
- The informarion passed on shoud be correct.
- In formation should be passed on without any delay.

4.4.1.5 Classifying Quality Elements

As discussed in section 3.3, it is imperative to classify and group the quality elements into different categories for developing measurement and quality mechanism for service system, because it is unworkable to discuss all elements individually. These can be classified as :

- Tangibles
- Cleaning of room
- Minimizing guest disturbances
- Operations

The tangibles can be further divided into several categories follows.



4.4.1.7 Measurement and Control Mechanism for Guest Room Upkeeping

After classifying the quality elements to different categories, it is possible to develop measurement, control methods and standards for measurement, as discussed in the section 3.3. The scheme for measurement and control mechanism for room service is given in Table 4.7, according to the format proposed in Table 3.7. The methods discussed are collected from variety of sources as discussed in sectionr 3.3.2.

In housekeeping the most difficult task is to remeber all the details of the operations to be carried out. For maintenace or cleaning of a single item, the maid has to follow several minute steps to sucessfully carry out the intended housekeeping operation. To mitigate this problem,

the checklist should be prepared for different activities and maids should follow them. The type of checklists that can be used for guest room upkeeping operation are :

- Checklist for list of equipments requiring daily inspection.
- Checklist to list down the steps to be carried out for proper inspection of a equipment.
- Checklist to list the name and number of guest supplies requiring replinshment.
- Checklist to list name and number of furnitures, areas requiring cleaning.
- Checklist outlining the standards steps leading to the successful cleaning of an item.

The examples of three checklists shown in Fig. 4.10, Fig. 4.11, and Fig. 4.12.

1 soap dish	1 ashtray with matchbox	1 bath towel
2 soaps for guest	1 shower cup per person	1 face towel
1 candle stand	1 shoe mit	1 hand towel
2 disposable bags	1 blade dispensor	1 bath mat

Fig 4.10 : Checklist of guest supplies for a bathroom

Air conditioners	Defrosting of refrigerator
Televison	Music system
Fan	Drain and C. P. grating
Lights and switches	Tap & shower operation
Lock operation	Bathroom equipments
Window operating	

Fig 4.11 : Checklists of equipments for daily

Spot free	Plug hole, plug & chain
Inside and outside	Overfolw
Underneath	Fitters
Taps	

Fig 4.12 : Checklist for inspection of a basin inspection

Table 4.7 : Measurement and control mechanism for guest room upkeeping

Factors	Particular examples	Critical parameters	Control	Measurement methods	Possible standards
Tangible	Guest supplies	Quality	<ul style="list-style-type: none"> • Proper storing condition. • Using renowned brands only. • A systematic method to categories good and bad quality products. 	<ul style="list-style-type: none"> • Inspection by maid before supplying to guest room. • Quality check during purchase and storage. • Complaints from customers. 	<ul style="list-style-type: none"> • Specifying the standard like ISI standard products. • Using a rating system and deciding a permissible limit for average quality for a fixed period/ for a list of items.
Tangible	Guest supplies, linens	Availability	<ul style="list-style-type: none"> • Ensuring a minimum stock at floor linen rooms. • Checking against a standard list while collecting supplies. • Using a standard checklist while placing supplies in the guest room. (A typical checklist is given in Fig. 4.10) 	<ul style="list-style-type: none"> • Guest complaints. • Calculating the number of needless trips by maid to collect forgotten items. • Checking by supervisors against the checklist. 	<ul style="list-style-type: none"> • Number more than two comments by maid. • Number of trips. • Number of items per room found missing.
Tangibles	Linens	Cleanliness	<ul style="list-style-type: none"> • Responsibility of laundry service. 	<ul style="list-style-type: none"> • Responsibility of laundry service. 	<ul style="list-style-type: none"> • Number of times dirty linens are supplied.
Tangibles	Furniture, fixtures, equipment	Cleanliness and look, Convenient, operating	<ul style="list-style-type: none"> • Regular maintenance. • Robust design for rough use by the customers. 	<ul style="list-style-type: none"> • Guest complaints. • Checking of 'cleared rooms'. 	<ul style="list-style-type: none"> • Rating by out side agency about the quality of furniture.

Table 4.7 (contd.)

		condition	<ul style="list-style-type: none"> • Use of checklists while cleaning of room. • Ghost shopping at others premises. • Use of standard procedures for cleaning and maintenance. 	<ul style="list-style-type: none"> • Video recording of events. • Personal certification by supervisory staff. • Note of dissent by the next employee who enters the room. • Guest complaints. 	<ul style="list-style-type: none"> • No. of rooms cleaned by single employee. • Total no. of complaints/ dissent for a fixed period. • No. of complaints/ defects for each maid..
Tangibles	Bed, guest belongings, movable usable	Properly arranged	<ul style="list-style-type: none"> • Use of standard procedures like 'making of bed'. • Video recording of activities to train and find out defects of personnel. 	<ul style="list-style-type: none"> • From registers indicating the cleaning schedule. • Checking against a standard checklists. • Customer complaints. • Note of dissent by fellow employees like butlers, if they found any uncleanliness. 	<ul style="list-style-type: none"> • Maximum no. of times cleaning schedule is not followed. • Rating about the seriousness of complaints.
Service environment	Guest room interiors (carpets, floor, walls, curtains, top of doors, top of cupboards etc.)	Cleanliness	<ul style="list-style-type: none"> • Giving special importance to high risk areas like corners, top of cupboard. • Designing to make the housekeeping easier and less time consuming. • Employing enough personnel. • Following standard procedures for cleaning as shown in Fig. 4.12. • Following the procedures in a 	<ul style="list-style-type: none"> • From registers indicating the cleaning schedule. • Checking against a standard checklists. • Customer complaints. • Note of dissent by fellow employees like butlers, if they found any uncleanliness. 	<ul style="list-style-type: none"> • Maximum no. of times cleaning schedule is not followed. • Rating about the seriousness of complaints.

Table 4.7 (contd.)

				systematic way.		No. of times it is violated.
Service encounter	Encounter while cleaning the room, passing through corridors	Minimizing guest disturbances, properly attired.		<ul style="list-style-type: none">Properly designed maid cart for not making any sound.Instructing maids “do’s and don’ts” while working in guest floors and guest rooms.	<ul style="list-style-type: none">Verifying do’s and don’ts whenever possible.(Ex. maid cart is placed at the side of the wall and not in the middle of entrance).Feedback from other employees.Inspection about the attire during briefing.	<ul style="list-style-type: none">No. of times it is violated.
Operations	Allotment of work load, passing information	Uniformly divided, correct and timely. Room status information.		<ul style="list-style-type: none">Specific guidelines.Using control cards instead of verbal communicationEasy availability of information by using on-line history cards.	<ul style="list-style-type: none">Records from registers.Complaints by maids about incorrect information.Personal inquiries by management about special facilities to VIP guests	<ul style="list-style-type: none">No. of times the record provides incorrect or unbalanced information.No. of times the defects are found out.

4.4.2 Analysis of Guest Room Design

The guest room interior is the ultimate experience for a guest. It is the window of a hotel to outside world in the sense that the standard of hotel is mostly judged by the design of its guest room. The government policy of converting the palaces of earlier maharajas into five star hotels is primarily based on this premise. The grandeur of design of these hotels provides a ready-made advantage. No wonder, that these policy of Government is highly successful. Hence, it is a primary necessity of any hotel that the guest rooms should be lavishly, exotically and correctly designed, especially in high spending hotels.

As the design of does not resemble a service delivery process, the analysis of guest room design cannot be done through the structured framework proposed in chapter 3. Instead, in this section an attempt has been made to answer two basic questions which influence the quality of the design of a guest room. They are :

- (1) What are the quality elements for proper design of a guest room?
- (2) What are the standards that can be used for the quality elements?

4.4.2.1 Quality Elements for Design.

(i) General

- Cramped living space should be avoided.
- Inconvenient utilities (T.V. without a remote) is highly undesirable.
- Easy to use appliances.
- Adequate area for visiting and writing should be provided.
- The bed should be comfortable and aesthetically fulfilling.

(ii) Floor covering.

- Following factors are of special importance.
- Soundproofing.
- Easy cleaning.
- Luxurious and beautiful.
- Adequate tensile strength.
- Cultural values.

(iii) Wall covering.

- Materials used for walls should be long lasting.
- Painting is of proper quality.
- Colour variations are impressive.

(iii) Drapers (window screens)

- Privacy of guest.
- Easy to use.
- Easy cleaning.
- Separate curtains for day and night.
- Protection from sun.
- Consideration for culture and life style.
- Cost

(iv) Accessories

- Availability of all type of accessories which are needed by the guest to stay comfortably for a couple of days, like chair, table, phone, bedlam, night-stand etc.

(V) Guest supplies

- Availability of all type of usables consumed by the guest during his stay in the hotel.

(vi) Bathing and dressing

- Adequate shelf and counter space upon which to spread toilet articles.
- Proper light and mirror.
- Two small lamps.
- The lavatory should be properly placed.
- Adequate towels racks and hooks.
- A basket or covered hamper for disposing of paper and dirty linens should be placed.
- Effective safety devices
- All fixtures should be located closely
- Suppressing noise from one to other guest units.
- Exhaust ventilation.
- Own heating unit.

- Additional services like telephone extension, soap dishes, magnifying mirrors etc.

4.4.2.2 Using Standards for Design

While designing for a hotel, there are various standards that can be used to improve quality. The standards that are used, depends upon various characteristics that are important to design. These characteristics are quality elements for the process of design. If these quality elements are controlled so that they don't exceed the permissible standard, then the quality can be achieved in the overall design. The Table 4.8 provides the standards for the quality elements of a guest room.

Table 4.8 : Standards for the quality elements of the design of a guest room

Factors	Characteristic (Quality elements)	Standards	
Tangibles	Property	<ul style="list-style-type: none"> • Softness of pillow. • Non skid material for tub and shower. <p>Sound proof material for walls to minimise noise.</p>	
	Mechanical property	<ul style="list-style-type: none"> • A typical mechanical property for carpet is given in Fig, 4.13. 	
	Quantity	<ul style="list-style-type: none"> • Kg of cotton in a pillow. • Pieces of table in a room. 	
	Shape and size	Length & breadth of bed dining table, shape of mirror etc.	
	Space allocation	<ul style="list-style-type: none"> • A typical standard is given in Table 4.9. 	
	Positioning	1. Fixtures 2. Fixed tangibles	1. Handles placed at convenient heights and angles. 2. Tables on which customer is expected do paper work should be placed very near to window panel.

		3. Consumable	3. Phone directory near phone, feedback cards and information card on the outer table of room.
	Aesthetic look, colour combination etc.	<ul style="list-style-type: none"> • Painting on wall, • Colour of bed linens etc. 	
Appliances	Robust	<ul style="list-style-type: none"> • Appliances that are likely to be used roughly by the customers. 	
	Features and flexibility	<ul style="list-style-type: none"> • Phones with facility to record incoming messages. • TV with a remote. 	
	Look	<ul style="list-style-type: none"> • Blades of electric fan. • Good looking electric switches. 	
Special arrangement	Better climatic condition	<ul style="list-style-type: none"> • Proper ventilation, fresh air, access to sunlight. • Guest room windows should be faced towards greenery areas. 	
	Easy to use and convenience	<ul style="list-style-type: none"> • Separate lifts for employees and customers. • Lifts should be avoided near guest room. 	
	Less service time	<ul style="list-style-type: none"> • Butler room at every floor for quick service. • Information and registration counters are adjacent. 	
	Specific requirements like safety.	<ul style="list-style-type: none"> • Steam pipes should be near to storage places. 	

Table 4.9 : A model space allocation percentage of a hotel

Entry and storage of guest cloth's and baggage	15%
Living and recreation	25%
Bathing and dressing	20%
Sleeping	40%

SPECIFICATIONS

Construction	: Performance requirement
Number of colours	: Two
Composition of surface yarn	: Wool : Bril Nylon :: 80 : 20
Height of pile	: 10 mm
Area of pile	: 10 ft * 20 ft for rooms : 2 ft * 3 ft for lifts : 2 ft * 10 ft for corridors
Backing material	: Cotton / Jute

PERFORMANCE REQUIREMENTS

Dynamic loading	: Loss of pile height at 1000 impacts not more than 30%
Compression recovery	: Recovery not less than 80%

TEST RESULTS

Sample	No. of runs	% compression recovery	% loss in height	Composition		
				Wool	Nylon	Price
1	100,000	78.9	9.8	71.5	28.5	Rs X
2	44,000	67.8	15.8	72.7	27.3	Rs Y
3	90,000	73.8	16.1	77.7	22.3	Rs Z

Fig. 4.13 : Mechanical property of carpets (based on documents of Oberoi Hotel)

FEEDBACK MECHANISMS

In the preceding chapters, service systems are analyzed so as to find the mechanisms to control the quality of service delivery. This chapter will discuss the methods to assess the quality of the actual service delivered. The best way to assess quality in a hotel service is to get feedback from the customers who receive the service. Hence, there should be a mechanism to systematically and regularly collect the customer's information. The type of customer information that a hotel should collect are :

- Type of customers that hotel serve
- Retention percentage of the hotel
- General need of need of customers
- The satisfaction parameters that plays a key role in overall satisfaction of customer.
- Personal preferences of regular customers
- Relative importance of different needs to overall satisfaction.

There are several ways in which customer feedback can be collected. The important among them are discussed.

5.1 Use of History Cards

A history card is a table of information about the preferences of an individual customer. These information are collected from the personnel of various departments. They are compiled and recorded in a history card. A typical history card will look like as shown in Fig 5.1.

Customer name:	Address:		
Profession:	Contact phone no.:		
No. of visits:	Average no. of days per visit: Date of last visit:		
Preferences:	Food	1. Cuisine:	
		2. Drinks :	
	Service	1. Room : <i>Likes jasmine flowers, swimming pool side room</i>	
		2. Restaurant : <i>Have a special liking for waiter Mr. Asit Kar</i>	
		3. Front office :	
Special Preferences: <i>He keeps his room open and hence do not knock while entering into room to serve morning tea.</i>			

Fig 5.1 A typical history card

5.2 Customer complaints and suggestions.

Customer complaint is an important tool to identify the problematic areas of a hotel. It gives important insight into the causes of customer dissatisfaction. Hence, the management should encourage customers to express their feelings. Customer complaints can be accessed in various ways. They are:

(a) In writing.

Providing easy to use comment cards in the guest room and collecting them after customers left the hotel.

(b) Verbally.

- In hotels, customers are very demanding and often express their displeasure at slightest pretext. these expressions of displeasure can be collected from customer contact employees. they should be encouraged to record down their experiences with the customer.
- Comment can be solicited from customers at various service encounters e.g. while customer is dining in restaurants, while customer is paying his bill during check out by asking questions like “ *Hope you have enjoyed the stay*”, “ *We would like to hear your suggestions for improving service*”, “*How is the preparation of*

cuisine”, “*We would like to know if you have faced any trouble*”. This is a very effective and practical way to know about the feelings of customers.

5.3 Structured Questionnaires and Surveys.

A better approach is to collect information from customers in a structured, systematic way by routinely asking them to fill the questionnaires. While designing questionnaires following points should be kept in mind.

- Questionnaire should be simple to understand.
- It should be easy and less time consuming to answer.
- The structure of questionnaire should be open-ended to solicit all types of information.

A sample questionnaire that can be used for hotel is shown in Fig 5.2. From these questionnaires, the guest comments can be inferred and they are tabulated in a structured way so that it can be discussed by the management in regular meetings. To use the comments in an meaningful way, and to fix the responsibility for corrective action, it can be tabulated as shown in Table 5.1.

Table 5.1 : Tabulating the customer comments.

Date	Na me	Room	Area of activity	Dept.	Comments
3/1/96	Mr.	Guest room	Maintenance	Water tap is linking
7/1/96	Mr. .		Restaurant	Housekeeping	Carpet is not hygienic

Period : Month of Jan, 1996

Total no. of questioners received : 34

Subject of comment	Comments
<u>Guest service</u>	
Handling of request	
Airport transfer service	<i>Car Pick up is missed.</i>
Doorman	<i>Doormen is inattentive while I arrived.</i>
Check-in	
Handling of baggage	
Message service	<i>Telephone service is poor</i>
Check out	
Information service	
Elevators	
<u>Quality of room</u>	
Housekeeping	<i>Door is making noise, W/C got choked and water overflows the room</i>
Furniture and fittings	
Bathroom	<i>No hot water, Shower inflexible, Hook loose for hangers</i>
Working area	
Lighting	
Temp control	
<u>Room service</u>	
In room dining	
Laundry service	
Butler service	<i>Waiter does not know how to interact with lady guests</i>
News paper	
Privacy	
<u>Staff attitudes</u>	
Friendliness	
Handling of requests	<i>In spite of several requests I have not got my bill ready.</i>
Promptness	
<u>Value for money</u>	
Accommodation	
food and beverages	
Overall experience	
<u>Restaurant service</u>	
Quality of food	<i>My favorite cuisine is not available</i>
Quality of beverages	
Service environment	<i>Banging noise from gas tank area</i>

Fig 5.2 A sample questionnaire for soliciting customer feedback

5.4 Soliciting Feedback From Internal Customers

In a hotel, internal customers are an important source of getting feedback about the quality of service. Management could promulgate a policy in which every employee is asked to submit a note of dissent, whenever they are not satisfied with the service received from other employees. These notes can be collected and compiled to be used as a feedback for improvement of quality in potentially problematic areas.

Besides, employees can be specifically asked to evaluate about particular service according to a set of defined criteria listed in an audit sheet. Table 5.2 shows a sample audit sheet for evaluating the quality of telephone communication of the telephone operators in information section.

Table 5.2 : A sample audit sheet to solicit feedback from internal customers to evaluate quality of telephone communication

		Date :	Time:
Sl. No.	Evaluation criteria	Yes/no	Remarks
1	The call was answered in the first three rings(or before)		
2	The greeting was warm and friendly		
3	The area was identified after greeting		
4	In case your call had to be transferred, it was done after duty, informing you		
5	The call was correctly transferred		
6	In case you had to leave the message, the message was taken and repeated to you with all relevant details.		
7	Your query was handled efficiently(all the relevant information was given to you)		
8	The first you spoke to, handled all your queries i.e. he/she did not bounce you off)		
9	Your query was handled in a proactive and helpful manner		
10	The called department waited for you to hang up first		

ANALYSIS OF VARIATIONS IN QUALITY

To judge the performance of a service delivery system, it is necessary to find out the variations of quality of service over a fixed period of time. The amount of variation and the fact that the variation is better or for worse will reflect the effectiveness of the present system. In a hotel service, the retention rate and the market share is a fairly good indicator of this variation. But, these factors may be influenced by the market forces like increase in competition, slow down in industrial activity, an increased interest as a tourist location and other such factors.

Therefore, the hotel should have a systematic method of its own which calculates the actual variations of quality of service it delivers. It should be independent of market forces and solely dependent upon the performance of its service delivery systems. There are broadly two ways in which the variations of quality can be measured.

6.1 Assigning Weightage to the Measures of Quality

6.1.1 Using Quality Elements as the Measures of Quality

The identification, measurement, and the standards of the quality elements are proposed in chapter 4. These quality elements can be ranked depending upon the extent to which their actual value differ from that of their standards. Then the quality elements can be categorized according to the similarity of characteristics and each category can be assigned a weightage depending upon its importance to the overall quality of service as shown in Table 6.1. The variation of total score for a period of time will reflect the variations of quality.

Table 6.1 : A scheme for categorising quality elements to measure variations of quality

Category	Relative Weightage
Behavior of personnel	20%
Quality of consumable and usable	15%
Presentation of service (dress, tray, menu card etc.)	10%
Physical service environment	20%
Access and service delivery time	10%
Correctness of information's	10%
Correctness of procedures	7%
Functioning of equipment	8%
Total	100 %

6.1.2 Using Customer Feedback as the Measure of Quality

Due to the subjective nature of service quality, guest feedback plays a key role in understanding the difference between customer expectation and actual service. This difference is the primary reason for variations of quality. Hence, another vehicle of measuring variation is the customer's feedback about quality of service. The customer comments received through use of feedback mechanisms, as discussed in chapter 5, can be categorized according to their attributes and each category can be assigned a weightage as shown in Table 6.2. The variation of total score will reflect the variation of quality.

Table 6.2 : A scheme for categorising guest comments to measure variation

Attributes	Relative weightage
Service	20%
Speed	15%
Quality	15%
Attitude	20%
Facilities	10%
Value for money	20%
Total	100%

It may be noted that the relative weightage as proposed in Table 6.1 and 6.2 cannot be same for every hotels, because the type of customers and their needs are different for varied class of hotels. A luxury hotel may emphasize on the physical environment aspects, where as, a budget hotel will put more emphasis on the quality of consumable and quality of usable. Hence, the management of the respective hotels in consultation with customer contact employees and regular customers should decide about the areas in which hotel will put more emphasis for measuring variation of quality and accordingly assign the weightages.

6.2 Monitoring Critical Quality Elements

In any service delivery system, there are numerous quality elements, as listed in previous chapter, which control the quality of service. But, all quality elements have not equal influence on the quality of service. Some of them significantly affect the quality while others have limited influence. If these critical elements can be identified properly, then monitoring their value individually will reflect the variations of quality.

6.2.1 An Illustrative application of Statistical Methods to Identify Critical Quality Elements

The overall satisfaction of a customer is determined by his experience with various service he encounters while staying in the hotel. The important service areas of a hotel are :

- Guest service at front office
- Quality of room
- Room service
- Staff attitudes
- Restaurant service

Some of these services have a significant relationship with overall satisfaction and others may have a weak relationship. To find out these relationships, the information about the level of satisfaction of customer in different services can be found out through a questionnaire as shown in Fig 5.2. At the same time customers can be asked about their

overall experience while they are checking out from the hotel. The information thus collected can be given a ranking as shown in Table 6.3.

Table 6.3 : A scheme for ranking customer comments about the level of satisfaction

Comments	Poor	Satisfactory	No comment	Good	Excellent
Score card	-1	1	2	2	3

From the score card, one important observation can be made - when the customer does not comment anything a positive score of 2 is given and for comments as 'satisfactory' a score of 1 is assigned. The basic reason is that the customer generally does not give any comment even if he is fully satisfied with the service and at the same time any comment other than 'good' or 'excellent' reflects that the service is not upto his expectation. The variables that are used in the analysis are described in the Table 6.4. Table 6.5 gives sample data for customer comments of 19 customers which is taken for analysis.

Table 6.4 : The list of service areas and their variables in Table 6.5

Variable	Dependent/Independent	The service areas
Osat	Dependent	Overall satisfaction
Room	Independent	Quality of guest room
Restu	Independent	Restaurant service
Staff	Independent	Staff attitude
Foffice	Independent	Guest service at front office
Rservice	Independent	Room service

The multiple regression of the data for Table 6.5 is carried out using SPSS package, the R- square and regression coefficients (B) of independent variables are as follows.

R Square .82161

----- Variables in the Equation -----

Variable	B	SE B
ROOM	.525947	.252542
RESTU	.198181	.220734
STAFF	.237225	.290684
FOFFICE	.153370	.296911
RSERVICE	.182449	.182160

Table 6.5 : A sample data of customer comments

Customer No.	Osat	Room	Restu	Staff	Foffice	Rservice
1	3.00	3.00	3.00	2.00	2.00	3.00
2	2.00	2.00	2.00	2.00	1.00	1.00
3	2.00	1.00	1.00	1.00	1.00	2.00
4	2.00	2.00	2.00	2.00	2.00	1.00
5	1.00	1.00	2.00	1.00	2.00	-1.00
6	1.00	2.00	2.00	1.00	1.00	1.00
7	-1.00	-1.00	-1.00	1.00	1.00	1.00
8	2.00	1.00	2.00	2.00	1.00	1.00
9	3.00	3.00	2.00	2.00	2.00	2.00
10	2.00	2.00	2.00	2.00	1.00	2.00
11	1.00	1.00	1.00	1.00	2.00	1.00
12	1.00	1.00	1.00	1.00	1.00	2.00
13	2.00	2.00	1.00	1.00	2.00	1.00
14	1.00	1.00	1.00	1.00	1.00	1.00
15	2.00	3.00	2.00	2.00	2.00	2.00
16	3.00	3.00	1.00	2.00	2.00	2.00
17	1.00	1.00	1.00	1.00	1.00	1.00
18	1.00	1.00	1.00	2.00	1.00	1.00
19	2.00	2.00	2.00	2.00	1.00	2.00

The above result shows a R-square value of 82 % which is reasonably high. But it also indicates that there are other service areas which contribute to the overall satisfaction of customer. The B coefficients of the variables reflect that the quality of guest room has a significant effect on overall satisfaction compared to other service areas.

One drawback of above analysis is that data of Table 6.4 may reflect multicollinearity which is the hallmark of any data collected through customer feedback. To eliminate muticollinearity several methods can be applied to make the variables independent before applying multi-regression. They are:

- Equity estimator regression [Krishnamurthy, 1987].
- Logistic regression [Zahock, 1993]
- Use of dummy variables.

The use of dummy variables is discussed in this chapter because of its simplicity for analysis. Four dummy variables - *excellent* (excel), *good*, *satisfactory* (satis) and *poor* are taken in the analysis. These variables will take the value of 1 or 0 depending upon value of *quality of guest room*. For example, when the value of guest room is 'satisfactory' then the variable satisfactory have value 1 and all other variables 0. Besides when quality of guest

Table 6.6 : The value of dummy variables of quality of guest room

Customer No.	osat	room	excel	good	poor	satis
1	3.00	3.00	1.00	.00	.00	.00
2	2.00	2.00	.00	1.00	.00	.00
3	2.00	1.00	.00	.00	.00	1.00
4	2.00	2.00	.00	1.00	.00	.00
5	1.00	1.00	.00	.00	.00	1.00
6	1.00	2.00	.00	1.00	.00	.00
7	-1.00	-1.00	.00	.00	1.00	.00
8	2.00	1.00	1.00	.00	1.00	.00
9	3.00	3.00	1.00	.00	.00	.00
10	2.00	2.00	.00	1.00	.00	.00
11	1.00	1.00	.00	.00	.00	1.00
12	1.00	1.00	.00	.00	.00	1.00
13	2.00	2.00	.00	1.00	.00	.00
14	1.00	1.00	.00	.00	.00	1.00
15	2.00	3.00	1.00	.00	.00	.00
16	3.00	3.00	1.00	.00	.00	.00
17	1.00	1.00	.00	.00	.00	1.00
18	1.00	1.00	.00	.00	.00	1.00
19	2.00	2.00	.00	1.00	.00	.00

room shows a value 'no comment', the variable good will have a value 1. However, the dependent variable take same value as overall satisfaction (osat). Thus a matrix of dummy variable is formed as shown in Table 6.6.

Multiple regression is again applied to these dummy variables excel, good, poor and satis with respect to dependent variableosat. In this regression, the dummy variables are

completely independent of each other, thereby eliminating multicollinearity from the regression process. The result of regression is shown below.

R Square .82161

----- Variables in the Equation -----

Variable	B	SE B
Good	2.083333	.649055
Poor	-.750000	.466797
Excel	3.000000	.590457
Satis	1.392857	.645850

From the above analysis, B coefficient for 'excellent' is found to be very high, reflecting that the excellent quality of guest room has a significant influence on the overall satisfaction. Hence, it can be concluded that the quality of guest room is a critical service area of hotel according to the sample data of Table 6.4.

With the conclusion that quality of guest room is an important indicator of overall satisfaction, the critical quality elements of this service have to be identified which significantly influence quality of service. The quality elements for the quality of guest room has been identified in the section 4.4. As the list of quality elements is long, only a subset of these quality elements which are tabulated in Table 6.7 are taken for analysis. The data for the quality elements of Table 6.7 should be collected over a period of time and then compiled to find out the average values of quality elements for a specific period. During the same period, the overall quality of service should be found out. The overall quality of service for a fixed period can be found out using one of the following measures.

- (a) Attractiveness. It is defined as the ratio of number of new customers who choose the hotel to the total number of new customers that entered to market. These data can be found out from the registration records of different hotels who act as a competitor in the same market.

- (b) Repurchase intention. It is the percentage of customers who has responded positively, when asked whether they would like to choose the hotel again. This data can be collected by sending mail to the customers after they leave the hotel.

Table 6.7 : The set of quality elements for quality of guest room

Quality element	Variable	Measurement method	Unit of measurement
Cleanliness	Clean	Time spent by the maid for cleaning one guest room which can be found out from the record containing cleaning schedules and the number of rooms cleaned by the customer..	Minutes
Availability of guest supplies	Avail	Guest supplies found missing during periodic verification by supervisor	Number of items.
Quality of linens	Linen	Measuring the whiteness of linens at the store before supplying to maid. The measurement is done using special machines.	Unit of whiteness
Arrangement of furniture and other movable items	Arrange	Taking photograph of cleared room and analyzing them to find out the flaw in the arrangement.	Seriousness of flawed arrangement can be ranked from 1 to 5.
Operating condition of equipment, fixtures and furniture	Operate	Record from the registers showing unscheduled maintenance of guest room done by the maintenance department because of complaints from guest or dissent notes from maid.	Time spent for unscheduled maintenance in minutes
Disturbance to guest"	Distur	Complaints by the guest.	Number of time guest complaints.

- (c) Retention rate. Number of old customers who come again to hotel. Besides the number of time a regular customer has come to the hotel should also be taken into account while calculating retention rate.
- (d) Overall customer satisfaction score. It can be calculated from the information gathered from customer comments.

Amongst these, repurchase intention is most suitable to be taken as a measure of quality for a fixed period [Rust, 1995]. It reflects the level of quality of service for the preceding period and hence its value should be related to the values of quality elements of the preceding period. A sample data for a period of 11 months is given in the Table 6.8, with the each individual data representing the average value of parameters for a period of one month. The name of independent variable in the analysis representing repurchase intention is 'repur'.

Table 6.8 : A sample data of quality elements of guest room and repurchase intention for a period of 11 months

Month	Repurch	Clean	Avail	Linen	Arrange	Operate	Distur
Jan.	.30	95.00	20.00	1.23	2.00	57.00	12.00
Feb.	.35	105.00	23.00	1.50	3.00	55.00	7.00
March	.70	210.00	5.00	2.80	1.00	12.00	3.00
April	.40	120.00	12.00	1.70	2.00	45.00	7.00
May	.52	147.00	3.00	2.00	1.00	30.00	4.00
June	.20	56.00	34.00	.80	5.00	85.00	12.00
July	.34	115.00	24.00	1.20	5.00	60.00	8.00
Aug.	.43	120.00	15.00	1.70	2.00	40.00	6.00
Sep.	.45	125.00	17.00	1.70	2.00	40.00	6.00
Oct.	.90	178.00	1.00	5.50	1.00	12.00	2.00
Nov.	.10	45.00	45.00	.65	5.00	95.00	17.00

The multiple regression is carried out with the above data, the result of which is given below.

R Square .99704

----- Variables in the Equation -----

Variable	B	SE B
ARRANGE	.003228	.017715
AVAIL	-7.08019E-05	.002122
CLEAN	.001199	8.2254E-04
DISTUR	-.005570	.006691
LINEN	.088128	.008538

The units of measurement of the independent variables are different. Hence B coefficients of the independent variables cannot be taken as an indicator of the level of influence of independent variable on dependent variable. Rather, the ratio of B to SE B can be taken as an indicator for this purpose. Besides the amount of change of R- square by eliminating one of the independent variable will also reflect the level of influence of that variable. The ratio of B to SE B is given in Table 6.9.

Table 6.9 : The ratio of B coefficient to SE B of quality elements of guest room

Variable	The ratio of B to SE B
ARRANGE	.176
AVAIL	.035
CLEAN	1.338
DISTUR	.83
LINEN	11.0
OPERATE	.333

From the Table 6.9, the ratio of B to SE B for variable 'linen' is found to be very high. Hence it can be concluded that its influence on dependent variable 'repurch' will be significant. To find out whether there is any change in R-square due to the presence of independent variable 'linen', the multiple regression is carried out again after eliminating the variable 'linen' from the data of Table 6.8, R-square is reduced from .99 to .91. When multiple regression is carried out eliminating variables other than 'linen', the show that R-square changes from .99 to .98 or remain at the same level .99. This establishes the fact that the presence of the variable 'linen' influences the value of repurchase intention more than any other variable. Hence it can be concluded that the 'whiteness of linen' can be identified as a critical quality element according to the sample data of Table 6.8.

In this analysis, only one critical element has been identified because only one satisfaction parameter quality of guest room is considered and only the most significant quality element linen is identified. But the statistical method illustrated in this section can be used to identify a set of critical quality elements by including other significant parameters and also different a set of quality element instead of only the most significant one.

7

TOOLS FOR IMPROVING QUALITY OF SERVICE

The level of quality of service can be found out by measuring its variations as discussed in the preceding chapter. If level of quality for a particular service falls below the prescribed standard, then suitable actions should be taken to improve the service process. For effective corrective action, problem solving tools can be used to troubleshoot the problems associated with the process.

There are several quality problem solving tools used in manufacturing organizations which can also be used in service organizations. These methods have been found to be highly useful in high level quality planning as well as to provide ready-made solutions to the problems. In this chapter some of the quality problem solving tools used in manufacturing are discussed from the point of view of their adoption in a service environment with a special emphasis on hotel service.

7.1 Using Old Seven Quality Tools

The seven 'old' Japanese tools are now widely used by the progressive organizations in various sectors. Most of these are simple in concept and in structure and can be easily understood and implemented. These popular tools are:

- Cause and effect diagram
- Check sheet
- Histogram
- Scatter diagram
- Pareto chart
- Control chart
- Stratification analysis

To present an idea about the applicability, an example of improving quality of telephone service is discussed using cause and effect diagram, check sheet and pareto chart.

7.1.1 Use of Cause and Effect Diagram

Cause and effect diagram is a very useful method to identify all factors responsible for a particular outcome. To find out possible that makes customer wait to get the answer to his request over a phone, a cause and effect diagram is developed which is shown in Fig 7.1.

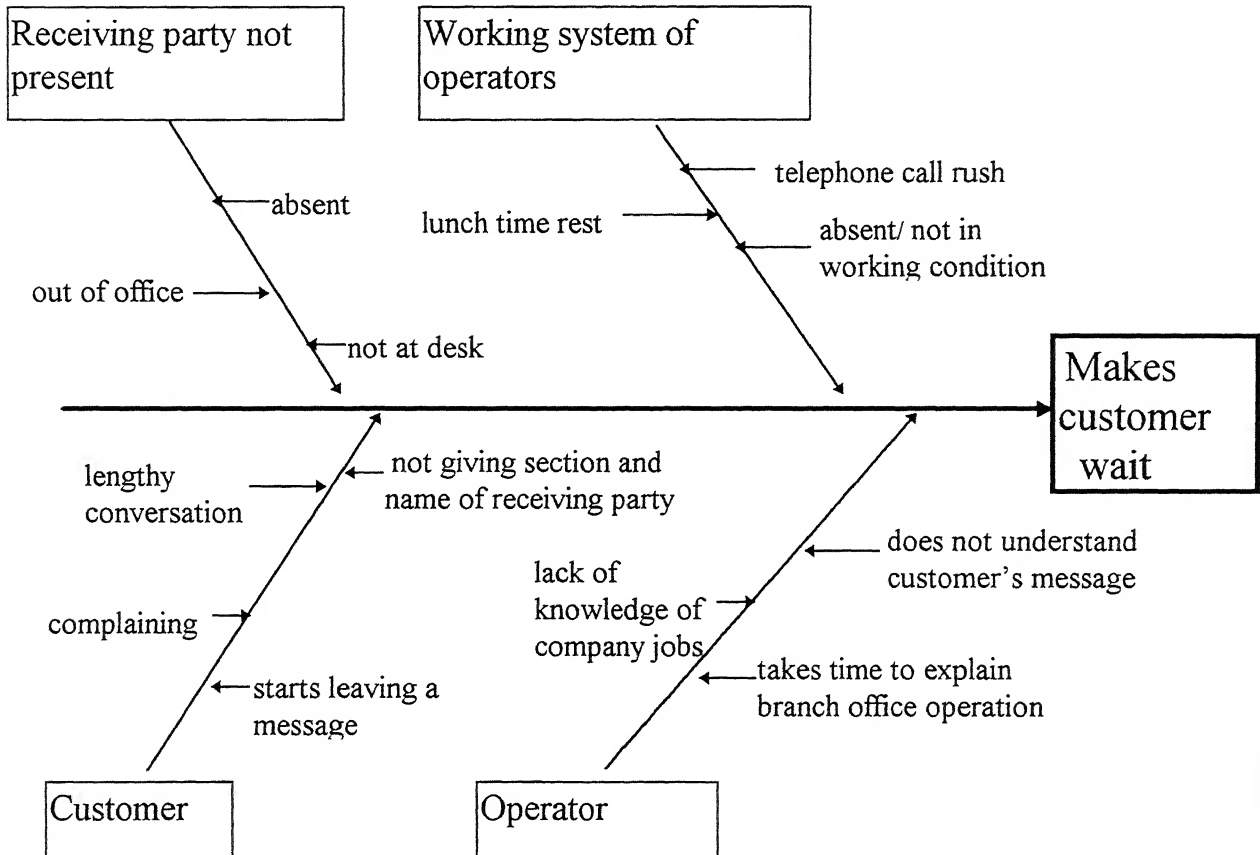


Fig. 7.1 : Cause and effect diagram for analyzing the factors related to telephone service

7.1.2 Use of Check Sheet and Pareto Diagram

The cause and effect diagram indicates a variety of reasons that may make a customer to wait. But to take corrective action, the specific reasons which causes the problem has to be found out. The check-sheet is used to compile and record the data relating to different factors that causes the problem, in a systematic way. From a check-sheet it is possible to identify the total number of defects in telephone communication per day. Such a check sheet is shown in Table 7.1.

The same data can also be used to calculate the daily average and total number of failures for a specific criteria as shown in Table 7.2. The data of Table 7.2 can be used to draw a Pareto diagram as shown in Fig 7.2. From this diagram the percentage of total defects for a particular criteria is found out. This helps to identify the major causes which makes customer to wait.

Table 7.1 : A sample check-sheet to identify the reasons for customer's waiting

Date - Reason	No one present in the section receiving call	Receiving party not present	One operator (partner out of office)	.	.	Total
day 1						24
day 2						32
day 3						28
.....				-		-
.....						-
day n				-	-	25

Table 7.2: Tabulating the number of failures for each criteria

	Reasons	Daily average	Total number
A	One operator (partner out of office)	14.3	172
B	Receiving party not present	6.1	73
C	No one present in the section receiving call	5.1	61
D	Section and name of receiving party not given	1.6	19
E	Inquiry about branch office locations	1.3	16
F	Others reasons	0.8	10
Total		29.2	351

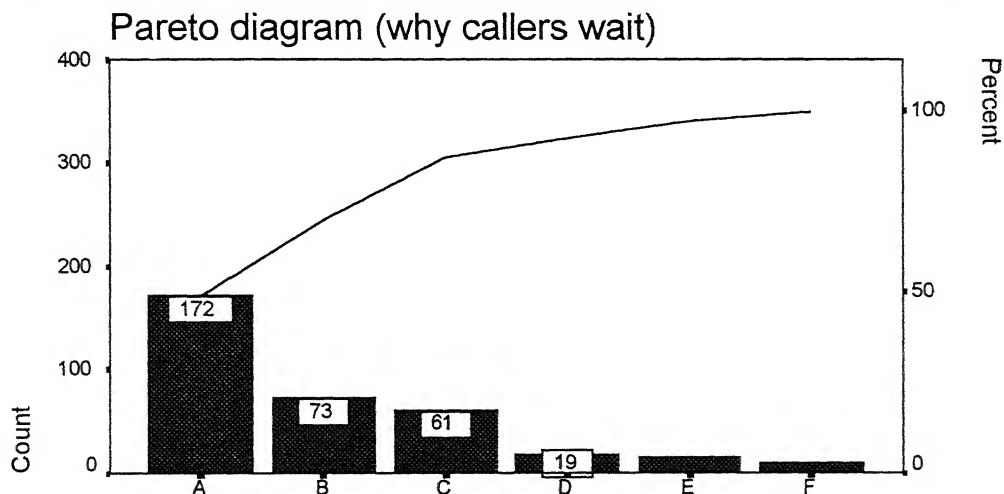


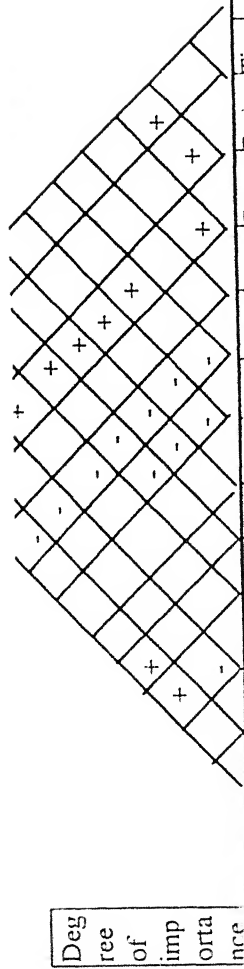
Fig 7.2 : Pareto diagram to find out the major reason for 'why customer wait'

7.2 Using Quality Function Deployment Technique

Quality function deployment (QFD) is a technique associated with new product development in the manufacturing environment. It helps to incorporate customer's voice in design & modification of products. QFD holds equal importance for the service industry, which should also be driven by customer satisfaction. In-fact, the application of QFD to service industry is more appropriate because of the importance attached to customer satisfaction to achieve service quality. It is basically a three phase process [Kolarick, 1995] :

- The process begins with the collection of data related to the voice of customer, or the customer requirements. The emphasis should be on to obtain an intimate understanding of who your customer are, what they want & why they want it. These data should be compiled to find out customer satisfaction characteristics.
- Next phase is to describe the service delivery process and its features. There should be a complete understanding of various features of the service delivery system.
- In the third phase, each customer satisfaction characteristics should be related to a corresponding technical quality i.e. quality element of service delivery system. There relationships, the target to be achieved, assessment of competition has to be found out.

The result of this exercise will be formation of QFD chart called as house of quality. This will help to find out priority areas where maximum effort is needed. Here an example of applying QFD method for velvet service of a hotel is given. Extending laundry service to clean the personal linens of guest service in a hotel is called velvet service. QFD chart is described in the given in the Fig. 7.3.



Quality element	Brig	Small	Spot	Press	Search	Alter	Buttons	Cleaning	Customer	Time	Sales	Competitor	Relative weight
Customer Language	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	7
Clean clothes	35	35	35	35	35	35	35	35	35	35	35	35	7
Good looking clothes	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	7
Fast service	35	35	35	35	35	35	35	35	35	35	35	35	5
Friendly service	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	7
Fix clothes	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	5
Return pocket contents	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	7
Inexpensive	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	3
Priority Scores	73	38	73	38	64	56	56	97	35	61	24	46	
* Priority quality characteristics	No yellowing	Fresh scent	No visible signs	Clean crisp linens	All pocket sets	To customer specification	Match in & specification	4 hours	By name & time of day	Ask for instructions	12 hours	5 min. max.	

Relative weights are set according to a quality strategy.

Relationships values are set as

⊙ : 5 + : strongly positive

○ : 3 - : strongly negative

Δ : 1

Cell scores are calculated as the product of the relative weight and the relationship value.

Fig 7.3: QFD diagram for velvet service of a hotel

7.3 Using Some Operation Management Techniques

Being a vast organization in which various processes are simultaneously carried out, hotel service is an ideal place in which operation management techniques can be used to improve the existing process..

7.3.1 PERT/CPM Technique

In a hotel, maintenance and upkeeping are two very important areas. The time required to change a broken window panel or to repair a defective music system in restaurant or installing a new easy to use table near the sitting arrangement of reception hall are vital to overall functioning of hotel. The maintenance, modification and upkeeping are regular operation of a hotel. PERT CPM is a very useful technique to make these operations efficient. The use of this method for installing a new kitchen equipment for renovation of the old kitchen is given below.

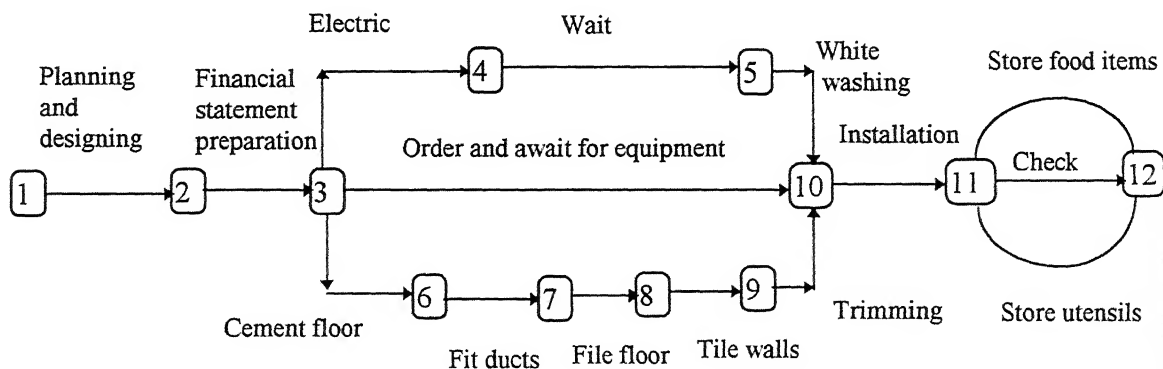


Fig 7.4 Installation of new kitchen equipment for modernization of kitchen facilities

7.3.2 Process Flow Chart

The process flow chart is a useful method in determining the points of bottlenecks in the service delivery process. It helps to eliminate unnecessary steps which does not add value to the overall purpose. It is particularly useful to improve efficiency of non-routine operations like emergency help to seriously ill personnel. In this situation, the response time is vital to the quality of service. In the Fig. 7.5 and fig. 7.6, it is shown how the process flow charts can be used to improve the response time. The improvements is listed in the table 7.3.

Subject charted : Handling seriously ill patients during night.

The scope : Chart begins with the customer intending to get required help till he sits in the car meant to take him to the hospital.

Date : Chart by : Chart no. : Sheet no.:

Department :

Dist. In feet	Time in min.	Chart symbols	Service delivery process description
	0.5 min.	○ ⇒ □ DV	Customer inquiries from telephone operator to contact whom.
	2min.	○ ⇒ □ DV	He checks the list and customer waits for response.
	0.5min	○ ⇒ □ DV	He informs guest to contact the business center .
	0.5min	○ ⇒ □ DV	Guest calls business center and the clerk receives call.
		○ ⇒ □ DV	The clerk asks his supervisor that there is an emergency call.
	2 min	○ ⇒ □ DV	The supervisor talks to guest to become sure (inspection) that there is a problem.
100ft		○ ⇒ □ DV	Then supervisor proceeds to guest room.
	4min	○ ⇒ □ DV	He inspects the guest physically.
100ft		○ ⇒ □ DV	Then he comes back and asks his clerk to prepare the paper work.
	3min	○ ⇒ □ DV	He waits until completion of paperwork.
	1min	○ ⇒ □ DV	He checks the papers after completion.
30ft		○ ⇒ □ DV	Messenger takes the papers to Bellmen captain.
	1min	○ ⇒ □ DV	Bellmen checks the papers and inquiries from messenger.
	0.5min	○ ⇒ □ DV	Bellmen informs car pick up personnel about the emergency supervisor.
	2min	○ ⇒ □ DV	Bellmen waits during which supervisor asks one of his driver to get ready.
200ft		○ ⇒ □ DV	The driver comes.
100ft		○ ⇒ □ DV	After his arrival, bellboy goes to guest room.
	3min	○ ⇒ □ DV	Guest gets ready. Hence there is delay.
100ft		○ ⇒ □ DV	Bellboy escorts guest to the lobby
	5min	○ ⇒ □ DV	Bellmen inspects guest to advise for the hospital.
		○ ⇒ □ DV	Guest makes necessary signatures in the paper.
50ft		○ ⇒ □ DV	Then bellboy escorts him to the car.

Fig - 7.6 : Process flow chart for emergency help to the seriously ill guest during night

Subject charted : Handling seriously ill patients during night.

The scope : Chart begins with the customer intending to get required help till he sits in the car meant to take him to the hospital.

Date : Chart by : Chart no. : Sheet no.:

Department :

Dist. In feet	Time in min.	Chart symbols	Service delivery process description
	0.5 min.	○ ⇒ □ D ∇	Customer is provided with an information card with the list of phone numbers about different department. from that list, customer contacts the business center clerk directly.
	0.5 min.	○ ⇒ □ D ∇	The clerk is empowered to take decisions & hence he directly calls bellmen to go to the guest room.
	0.5 min.	○ ⇒ □ D ∇	Then he calls the driver of car pick up service to get ready.
100ft	2min	○ ⇒ □ D ∇	The bellmen goes to the guest room and the driver get ready to carry the guest.
200ft	5min.	○ ⇒ □ D ∇	Bellmen inspects guest and discusses with him about the suitable hospital. at the same time driver comes to lobby.
	3 min.	○ ⇒ □ D ∇	Guest gets ready for the hospital and during which bellmen completes all the paper work.
150ft		○ ⇒ □ D ∇	Bell men accompany the customer to the car.

Fig - 7.6 Process chart for modified process

Table 7.3 : Summary of improvements with modified process.

	Original process	Improved process
No. of operations	6	4
Transportation	6	2
No. of inspections	5	1
Delays	3	0
Distance	680 ft.	450 ft.
Time taken (taking average time per phone call 0.5 min.)	25 min.	11.5 min.
Improvement due to simultaneous work	7 min. or 300 ft distance which ever is less time.	
Net improvement	13.5 min. + time taken for traveling a distance of 230 ft + 7min (or 300ft distance)	

7.4 Ergonomics

Ergonomics is a method to study various aspects associated with work. Being a hospitality industry, the techniques of ergonomics have added importance to study the problems related with personnel behavior. In general, the ways in which the ergonomics can be used are

The problem of work

- Dimensional measurement of quality
- The scope and limitation of muscular force
- The use of energy and fatigue.

Psychology techniques to work

- Psychology aspects of fatigue
- Fault finding & diagnosis
- Effect of age upon human skill.

Effect of environment on work

- Effect of light, heat and ventilation.
- Effect of noise
- Effect of cold.

EFFECT OF ORGANIZATIONAL ISSUES ON QUALITY SERVICE

In the preceding chapters, the discussion is centered around developing quality service by controlling service delivery systems of a hotel. The mechanisms are proposed for controlling service delivery systems, assessing quality of service, measuring variations of quality and using various tools to troubleshoot the problems related to quality.

This chapter discusses several organizational issues of a hotel which affect the provision of quality service in practice. These issues require complete understanding for effective implementation of the quality mechanisms discussed in previous chapters. They can be broadly categorized into :

- (i) human resource development and management, and
- (ii) other issues related to the effectiveness/capability of system for providing quality service.

8.1 Issues Related to the Effectiveness of System

8.1.1 Effective Use of Technology

- Service delivery process at one extreme consist of predominantly manual service provision (e.g. barbering); at the other extreme is predominantly machine service provision (e.g. vending machines). In between there are services like hotel service where technology is used to partially substitute labor (e.g. using computers at registration desk).
- Besides substituting labor, technology can be used to make the service more user friendly e.g. providing calling bell system in the guest room through which customer can promptly sought the service of butler/housekeeping-personnel in emergency.

- Technology can also be used for enhancement of service i.e. adding value to the service. The use of magnified mirrors in the bathroom, automatic locking systems for the door are some examples of enhancement of service through use of better technology.

8.1.2 Correct Amount of Self Service

Let us conceive a situation - a customer in a restaurant gives order to the kitchen through a interactive on-line system available at the dining table, there by eliminating the need for waiter coming to the dining table to take order. This arrangement will make the process efficient and reliable but it will be unable to satisfy the psychological need of customer to interact with other human being. This might result in lower customer satisfaction. Hence an important strategic issue for hotel managers is determining optimal role of customers to act as coproducers of service production. The trade off should be achieved between the increase in production efficiency and reliability of service from customer doing the work, with the possible decrease in customer satisfaction that would result from de-coupling the customer from the server.

8.1.3 Consistency of Service

Consistency refers to the absence of variation in the output of the service delivery system. For a hotel, it implies that the customer gets the same treatment, the same level of service, time and again. For example, a cuisine served to different guests, or at different time to the same guest should taste identically. Besides, the manners of offering food should be similar from one waiter to other waiter. The hotels groups controlling many hotels distributed geographically over a vast area, attempt to provide same quality of service in all hotels. This helps in gaining patronage of customers.

8.1.4 Maintaining Customer Privacy

While staying in the hotel, a customer wants his/her privacy should be maintained. Hence the hotel should plan for privacy in all areas of service encounters. Specifically, following provisions should be made.

- In the front office, the secrecy of customer records should be ensured.

- The room service and housekeeping personnel who come to the room, should follow the proper manners so that the guest doesn't feel that his privacy is threatened.
- While dining in the restaurant, the customer should feel free to discuss his private matters with his companion. Waiters should not appear overheard the conversations.

8.1.5 Handling of Emergency Situations

Hotel is a residential place and hence it is prone to different type of emergency situations. Likely emergency situations in a hotel are theft, accidents, vandalism, damage to property, fire in the hotel, and even death. Hence hotel should adopt precautions to avoid such type of situations. For example to avoid thefts, the precautions that can be taken are :

- Self locking room doors
- Safety deposit boxes for guests' valuables.
- Watching guests with light baggage who could become potential skippers.
- Strictly controlling the master key. Housekeeping staff are forbidden to open guest rooms for them.
- Keeping all entrances, corridors and staircases well illuminated.

8.1.6 Handling of Non-routine Demands

Non-routine demands are to be expected in a hotel organization. They should be resolved without excessive disruption of the otherwise efficient service delivery process. Hence, the hotel should give cross functional training to the employees which will allow diverting manpower from underutilized area to the busy area. This is especially important because of the government rules discouraging the use of temporary labors.

8.1.7 Processes and Procedures

In the hotel service, customer is often physically on-site and is playing a role in co-producing service. The degree to which customers are clear about executing their role within service delivery system, will greatly influence their perception of the quality of service. Hence the procedures like reservation, cancellation of reservation, registration, billing, ordering room service, should be simple and straight forward enough so that customer does not feel any difficulty or ambiguity for enacting his role as the co-producer of service.

8.1.8 Scheduling of Tasks

High customer contact employees require proper interpersonal skills and have to do a lot of mental work. But low contact employees require adequate production skills such as recording purchasing orders, maintenance of working areas, preparing food etc. Hence, the load of work should be different for them. For example, a reservation clerk who is answering 40 reservation requests in a hour, cannot work continuously for a long time. He should be allowed rest regularly at 30 minutes interval. Otherwise, his polite and warm way of answering to reservation requests will be affected. Similarly a waiter in a restaurant has to constantly give personal attention to every customer, assigned to him. Although his work is not significant in operational terms, the psychological effort required to constantly attend to the need of the customer in a pleasant manner, is very high. Hence the number of customers assigned to a waiter should not exceed 4 to 5 persons.

8.1.9 Materials Available When and Where Needed

Too often service is perceived as being labor intensive, assuming that as long as the employee is present, the service can be rendered. However the quality of service in a hotel to a great extent depends on materials like consumable and usable. Hence non-availability of materials will affect service delivery. For example, the purchasing, storage, and supply of guest supplies should be efficient enough so that supplies required by the maid to replenish the room should be always available. Besides tangibles like trolley used by bell boy, the internal phone directory of the guest room should be placed in their right position for efficient service.

8.1.10 Influence of Advertising on Quality of Service

An important influence of advertising on potential customer is the customer's expectation. To what extent the customer expectation has to be raised through advertisement, should be decided judiciously. False claims of excellent service should be avoided at any cost. An illustration described below emphasize this point.

A TV mechanic assures the customer that his TV will be handed to him before 10 am next day and actually handed over the TV at 12 am. Another mechanic gives him delivery time at 2 PM and actually handed over the TV one hour before at 1 p.m. Between these two

cases, the customer will be definitely happy with the service of second mechanic although the actual delivery is one hour late to that of first mechanic. The message is - advertisement about the hotel should not raise the expectation of customer to a great extent while the actual service do not match the expectation. This adversely affects the reputation and encourages the bad-mouthing by the customers, although the standard of service might exceed to that of the competitors.

8.2 Human Resource Development and Management

8.2.1 Personnel Selection

The goal of service excellence is more easily achieved [Lawler, 1994] by selecting candidates who have the right kind of attitude, rather than only the right measure of job

- A high sense of personal grooming.
- Adequate self confidence. He should be comfortable and feel at ease in dealing with different kind of people.
- Communication must be correct and clear.
- Ability to diplomatically deal with the people and help diffuse explosive moments.
- Quick decision making ability
- Calmness and patience to take busy demands of a front office operations.
- Ability to remember names and faces.
- Ready smile and rich manners.
- Physical fitness to stand for long hours at stretch .

Fig 8.1 : Qualities of a front office staff

skills. The job skills can be developed with training but it is very difficult to change the basic attitude and temperament of candidates. An ideal list of essential attributes that can be used for selection of candidates for the job of front office staff is shown in Fig 8.1. Besides, the selection process to select a candidate should be properly decided. An illustration involving three exercises for selection of a candidate for the job position of a reservation clerk who handles reservation request over phone is described below.

Exercise 1: A simple call in which candidates must persuade an unwilling customer that the cost structure of the hotel is commensurate with the facilities & the quality of services provided and to accurately complete a series of forms summarizing the information.

Exercise 2: A person who is uncooperative, harsh and eventually abusive while calling to make a reservation.

Exercise 3: A service call and requires the candidate to resolve a dispute over an advanced booking and the payment fee. Customer argues that the fault lies with the employee and the candidate needs to handle the issue.

From these exercises behavior and attitudes of a candidate that can be checked are shown in the following table.

Checklist	Response of candidates
Persuasion skill	Ability to persuade the customer about cost structure.
Ability to write while answering phone call	Accurately completing the recording of forms in exercise 1.
Social sensitivity	Candidates answers politely in the second exercise.
Dealing with pressure	Handling the abusing customer with cool head and not getting provoked easily.
Understanding capability	The problem of the customer is quickly understood by the candidate in exercise 3.
Communication skill	Explaining clearly the rules and regulations of hotel to the customer in exercise 3.

8.2.2 Employee Training

In hotel industry, the training is required to impart necessary skills so that employees can carry out their job in a manner conducive to the overall goal of achieving service excellence. For proper and effective training, the set of skills needed for a particular job position should be well defined. This document will help the trainer to focus the training programme for improving specific characteristics of trainee. Such a set of job skills for a cocktail server is described in Table 8.1 (based on the documents of Oberoi Hotel).

Table 8.1 : Sample job skills for a cocktail server

	Traditional job skills	Additional quality service skills
Knowledge	<ul style="list-style-type: none">• Calling order• Price categories and criteria• Abbreviations of drinks that are poured up or on rocks• Distinction between well, call, and premium• Bar table numbers• Wine list• Garnishes for drinks	<ul style="list-style-type: none">• Thorough knowledge of products in both lounge and dining room• Knowledge of restaurants systems that are accommodating to customers
Abilities	<ul style="list-style-type: none">• Approving a table• Taking an order• Putting drinks in calling order• Placing an order• Carrying a cocktail tray• Checking I. D.• Asking for reorders• Counting out change	<ul style="list-style-type: none">• Setting up an increment flow of service• Providing timely service• Anticipating service needs• Meeting customer needs to the extent possible• Obtaining feedback from customers• Using appropriate and tactful language with customers• Making helpful suggestions• Selling effectively by suggestions• Calling customers by name• Graciousness in handling problems or customer complaints
Attitudes	<ul style="list-style-type: none">• Graciousness• Smiling face• Concern for customer• Friendly tone of voice• Teamwork	<ul style="list-style-type: none">• Smiling body language - not just face - reflecting a positive attitude

8.2.3 Role Ambiguity

Role ambiguity occurs when an employee lacks salient information needed to effectively enact his or her role. Without proper grasp of the job, it may be difficult for an employee to do the perfect role playing. A familiar example of role ambiguity can be found in the activity of housekeeping personnel. While cleaning a guest room, he is supposed to keep an eye on details and efficiently clean the room. But when they encounter the guest in an occupied room, they have to behave like a waiter. These change of role may create role ambiguity. The role ambiguity leads to the improper understanding of the job. This reduces the commitment of the employee towards quality service. This problem is

generally tackled by preparing a proper job description document as shown in Fig 8.3, which clearly defines all aspects of job position.

8.2.4 Performance Appraisal

Presently, the norm of many hotel organisation is to link reward with productivity. Annual bonus are given taking into account the customer turn over rather than a planned way to measure the performance of individual employees towards customers. The flaw in this system is that there is no way to compare the commitment and contribution of individual employee towards improvement of quality of service. Hence, there is a need for linking performance evaluations to behavioral criteria which will give employees the incentive to engage in behaviors that are conducive to improve service quality. A sample evaluation form to evaluate service-related behavioral criteria for host of a restaurant is shown in Table 8.2 [Martin, 1991].

8.2.5 Employee Empowerment

Empowerment is thought to be necessary in a hotel because contact employees need the flexibility to make on the spot decisions for satisfying customers. Besides, empowered employees feel better about their jobs and more enthusiastic about serving customers, with an end result of quicker responses to customer needs and increased customer satisfaction [Bowen and Lawler, 1992]. In a hotel there are various ways by which employees can be empowered. the important among them are listed below.

- Giving employees complete freedom in their work while in contact with guest. Only general guidelines are provided to employees.
- Appreciating employees even if an employee breaks the hotel rules to satisfy customer.
- Encouraging initiatives from employees.
- Trusting employees to exercise good judgment.
- In high level meetings the representation from customer contact employees are invited to put forth their view point.
- Permitting employees to use their own judgment in non-routine situations.

Job description : *Front office assistant.*

Category : *Non-supervisory*

Reports to : *1. Front office supervisor
2. Front office manager*

Job Definition : *Reserve, register and assign rooms to customers.*

Directly : *Room racks, Arrival-departure register, Customer racks, Reservation
Controls racks, Guest room keys.*

Assigned area : *Front office: Registration and Reservation Desks.*
of activity

Hours of : *One shift in 24 hours for 8 hours or as per policy of the management*
operation

Authority : *Refuse reservation; give discounts as per policy; assign rooms and
deals with guests as found fit; can refuse divulging guest information to others.*

Work Performed :

Reservation

- *Promptly and courteously handle all reservation requests.*
- *Update regularly the reservation chart and rack.*
- *Keep all reservation correspondence up-to-date.*
- *Keep room availability status board up-to-date.*
- *Handle amendments and cancellations of reservations.*

Registration

- *Promptly and courteously register guests and assigns them rooms.*
- *Update the room rack continuously.*
- *Calculate room availability position and advise reservation*
- *Issue VIP amenities voucher*
- *Complete pre-registration formalities regarding foreigners.*
- *Continuously update guest rack.*

Coordinated with :

As internal customers

- *Housekeeping department for clearance of rooms to sell. It provides occupancy report to prepare a discrepancy report.*
- *Lobby provides the advanced information about the departure of guest.*

As internal suppliers

- *Lobby receives guest room keys and errand cards. Besides bell service is carried out only when the registration formalities completed.*
- *It provides information about guest arrival car pick up service.*

Fig 8.2

A sample job description document of a front office staff

Table 8.2 : Sample evaluation form for host of a restaurant

Name of employee:		Rater's name:				
Date:		Title:				
Attributes/ Skills	Job competency	Always	Mostly	Sometimes	Rarely	Never
Customer-relations	• Demonstrates the ability to answer correctly common question asked by customers.	5	3	2	1	0
	• Greets with a friendly welcome and big smile	5	3	2	1	0
	• Makes eye contact when talking with customers.	5	3	2	1	0
	• Handles customer complaints politely.	5	3	2	1	0
	• Refers to customers by name.	5	3	2	1	0
	• Wishes a warm goodnight to departing guests.	5	3	2	1	0
	• Asks for guest feedback from departing guests.	5	3	2	1	0
	• Able to make proper menu recommendations.	5	3	2	1	0
Comments on customer relations:						
Seating skills	• Records the correct table number on the ticket when seating guests.	5	3	2	1	0
	• Walks at the pace of the customers when escorting them to their tables.	5	3	2	1	0
	• Waits at the table until all guests are seated.	5	3	2	1	0
	• Quotes accurate waiting time when there is a wait to be seated.	5	3	2	1	0
	• Helps controls the flow by seating customers evenly through the sections and at staggered times.	5	3	2	1	0
	• Communicates seating and other needs effectively to other service personnel	5	3	2	1	0
	Comments on seating skills:					
Telephone skills	• Answers phone in friendly and helpful manner.	5	3	2	1	0
	• Answers the phone with " Hello thank you for calling the ..(dept.). This is ..(name). How can I help you".	5	3	2	1	0
	• Avoids accepting personal phone calls.	5	3	2	1	0
	• Gathers complete information.					
Comments on telephone skills:						
Proper image	• Attire is clean and neat.	5	3	2	1	0
	• Dresses properly for the position and occasion.	5	3	2	1	0
	• Keeps a neat and tidy front desk.	5	3	2	1	0
	• Avoids combining hair or applying makeup while stationed at the front desk.	5	3	2	1	0
	• Never sits down or reads at the station.	5	3	2	1	0
	• Avoids chewing gum and smoking at the station.	5	3	2	1	0
Comments on image :						
Job accomplishments and strengths		A. B.				
Areas requiring Improvement		A. B.				
Date:		Signature of Rater:		Signature of candidate:		

8.2.6 Employee Adaptability

Adaptability can be defined as the ability of contact employees to adjust their behavior to the interpersonal demands of the service encounter. It includes two very important characteristics of front-line personnel in a hotel. Firstly, is the ability to adjust behavior to suit different types of customers. Secondly, to properly tackle diverse interpersonal situations that arise in numerous service encounters. These two characteristics have a major influence on the outcome of service encounters. A model questionnaire for an hotel organisation that can judge the adaptability of its employees is given below.

- Do you agree with the fact that every customer requires a unique approach.
- When I feel that my approach is not working, I can easily change to another approach.
- I like to experiment with different approaches.
- I don't change my approach from one customer to another
- I am very sensitive to the need of my customers.
- I find it difficult to adapt my style to certain customers.
- I try to understand that I can effectively change my approach when necessary.
- I vary my approach from situation to situation.

8.2.7 Employee Job Satisfaction

The fact that a dissatisfied employee cannot satisfy a customer is well accepted by the management of hotels. This is reflected from the fact that the working environment of back office employees is made as good as front line employees e.g. cleanliness in the kitchen was never compromised, although this area is never accessed by the customers. Similarly the facilities that are used by the employees are also kept at a standard comparable to the overall standard of the hotel.

But, the employee job satisfaction is affected by several other factors. Hence, the hotels should conduct annual surveys to assess the level of overall employee job satisfaction. The type of questions that can be included in the survey are shown in Fig 8.3 [Michael, 1996].

- Are you satisfied with the role you are performing ?
- Do you feel proud of the organisation and its policies ?
- Are you satisfied with the cooperation you get from the fellow employees ?
- Are you satisfied with the behavior of your superiors ?
- Is the financial support provided by the organisation justified ?
- Do you feel the organisation will take care of you in your troubled times ?
- Do you feel the punishment and reward procedure is satisfactory ?
- Are the opportunities available for advancement with the organisation adequate ?
- Do the customers, you serve, treat you fairly ?

Fig 8.3 : A sample questionnaire for assessing employee job

9

A PROPOSED GENERIC QUALITY SYSTEM FOR HOTEL SERVICE

The discussions of preceding chapters clear the way for proposing a quality system for the hotel service, which will give a generic view of how the various activities should be planned for and executed in a hotel for achieving quality service.

9.1 Role of Management

9.1.1 Quality Policy

A model quality policy for a hotel is - staying ahead of other hotels by keeping pace with the latest trends in hotel service and quality of service should be continuously improved to minimize the gap between customer expectation and actual service provided.

9.1.2 Quality Goals

Quality goals for a typical hotel will be as follows :

- Hotel should achieve high (say 70%) retention rate.
- The number of housekeeping related complaints should not exceed few complaints (say 1) per person for a period of one month.
- The variation of overall satisfaction score as illustrated in chapter 6 should be low (say 10%) of total value.

9.1.3 Responsibility and Authority

- The supervisors of all departments should be designated as quality inspectors, who are responsible for discontinuing bad quality service.

- The training department will compile the data related to customer feedback and quality elements collected by different departments. Besides the training manager can act as a liaison between top management and supervisors.
- In hotels, the lower level employees are chiefly responsible for the standard of service offered. Hence, it is better to avoid separate quality department.

9.1.4 Resources and Personnel

- Additional responsibility that are given to supervisors and training manager for provision of quality service should be incorporated into the job manual and they should be adequately compensated for the additional work.
- The budget of the hotel should make provision for resources like computers to store the guest information in a history card, automatic measurement machines which measures the delay in receiving phone call, measuring instrument to measure whiteness of towels etc.

9.2 Design and Development

- The guest satisfaction parameters as listed in chapter 4 for various services should be collected using different feedback mechanisms discussed in chapter 5. This will constitute design input requirements.
- Then using the modified IDEF0 diagram proposed in chapter 3, the service delivery process can be developed. These diagrams should be modified and validated by the personnel involved in carrying out those activities to make it more effective.
- The successful design of these diagrams will help to convert the input requirements into output specifications - (a) the steps of process, (b) the manpower requirement, (c) the activities to be carried out by personnel (d) the tools to be used, (e) the requirement of service environment (f) the consumable/usable. A typical output specification for a restaurant service based on IDEF0 diagram of restaurant service (Fig. 4.6) is described below.

Steps of a process

- Entry into restaurants
- Receiving and seating of guest
- Taking order

Tools

- KOT (kitchen order ticket)
- Kitchen accessories
- Trolley

- Preparation of food
- Carrying food
- Offering food.
- Serving the guest
- Preparation of check and payment.
- Checking out

Consumable

- Raw materials for food items
- Linen
- Disposable items
- Gas, steam, water, electricity

Personnel

- Guard/receptionist.
- Host
- Waiter
- Restaurant supervisor
- Kitchen Supervisor
- Cook
- Housekeeping personnel
- Cashier

- Cultures and spoons
- Accessories of waiter

Activities of a waiter

- Accepting payment
- Arranging food items on a tray
- Offering food on the table
- Changing a stained table cloth

Service environment

- Entrance and gate
- Table and chair and sitting arrangement
- Sideboard
- Menu card
- Interior decor and climate, light and music
- Carpets, window screen. flower pots
- Cashier counter

9.3 Planning for Quality Measurement

To ensure that the service systems deliver quality service, there should be a mechanism to measure quality of service. The quality elements as discussed in section 3.2 can be taken as indicators of the quality for measurement of quality of service. These quality elements can be identified using the method proposed in section 3.2. Hence, to plan measurement of quality, all quality elements related to hotel service should be identified as discussed in chapter 4.

9.4 Defining Tasks and Job Skills.

- A job description document as shown in Fig 8.2 for each job position should be prepared. This will help to clearly define responsibility, authority and the expected tasks to be carried out by the employee of a particular job position.

- Besides, job skills required for each job position of a hotel should be clearly defined and a set of job skills as shown in Table 8.1 should be prepared. The preparation of job skills is especially important for personnel of front-line services.

9.5 Control of Service Production

To control the production of service delivery the factors that influences quality can be controlled. The important factors amongst them are discussed below.

9.5.1 Customer Well-being Control .

In a hospitality industry, customer well-being have an important bearing on customer satisfaction. The issue of customer well-being enters into almost all areas of service activities. There are two principal forms of customer well being which shall be recognized by an hotel.

- (a) Prestige well-being
- (b) Physiological well-being.

(a) Prestige well-being.

Guests like to feel important, be accepted and feel they are intelligent and knowledgeable. Hence, guest should be well informed about different services. Besides, the procedures to be followed by the guest to receive the service should be easy to understand. It avoids the feeling of ignorance. Besides, following instructions should be given to customer contact employees.

- They should have ready smile and courteous behavior.
- They should remember the names of regular guests.
- They should have a capability to quickly understand problems faced by the guest.
- They should voluntarily offer help without waiting for the guest to ask for help.

(b) Physiological well-being.

In a hotel, great care is needed to prevent the customer from developing mental anxiety conditions. Guest should experience a home away from home while staying in the hotel. Following points are especially important.

- The climatic condition of various service environments should be comfortable and relaxing to customers.
- Room service personnel should develop a rapport with customer to prevent the customer developing loneliness, worry and other mental anxiety conditions.
- Front office personnel should give a warm welcome to guests and help him to acquaint with new surrounding.

9.5.2 Time Control

- The length of access time at various service encounters, such as getting answer to reservation requests, ordering for room service, receiving answer to queries from information section, waiting for the waiter to take order in a restaurant, should be strictly controlled.
- Service time like the filling of registration form, preparation of food after order is taken, the time required for a room service personnel to attend the room on request from guest, should also be controlled.

Permissible standards for the access time and service time should be prepared e.g. phone call should be answered before three rings.

9.5.3 Material and Equipment Control

- Quality of raw materials to be used as consumable should be rigorously controlled by the purchasing department.
- Whiteness and cleanliness of linen should be should be always used after inspection of the proper cleaning.
- The purchasing and storage of usable, guest supplies should be strictly monitored.
- Maintenance schedules for all equipment should be prepared and it should be correctly followed.
- The maid, the cook and other internal customers should be empowered to reject the tangibles of inadequate quality.

9.5.4 Service Environment Control

- The building, the interior decor of restaurant, the design of elevators, the sitting arrangement in the reception hall, the look of reservation/registration/lobby counters are important determinant of customer satisfaction and hence their characteristics should be properly controlled.
- The climate of the environment should be conducive to the service encounter.

9.5.5 Working Environment Control

- Kitchen should be user-friendly and well maintained.
- Butler's office should be properly arranged and situated close to the guest rooms.
- Reservation desk should be equipped with adequate accessories. It should be designed so that staffs can sit for long hours and the workplace is isolated from outside disturbance.
- Laundry should be equipped with modern equipment and designed to handle large amount of linen.
- Stores should be designed to avoid the damage to the materials due to climatic condition. For example, the steam pipes should not be laid over rooms used as stores.
- The standard of elevator, corridor and passages used exclusively by the employees should be comparable to that of customers.
- All of above working places should be kept clean.

9.6 Handling of Customer Complaints

- Any employee who receives the complaint should own the complaint until it is resolved.
- Whenever customer complains to the waiter about bad quality of service, employee should readily apologize and either replace or discontinue the service.
- The extent to which front desk personnel can bend the hotel guidelines to resolve the customer related disputes should be clearly decided by the management.

9.7 Inspection and Measurement of Quality

- The inspection and measurement of quality should be carried out using measurement methods for four major service systems proposed in the sections titled as ‘measurement and control mechanisms’ in chapter 4.
- Amongst various methods that are discussed in chapter 4, the suitable method that can be used in practice should be decided according to the criteria outlined in the section 3.3.3.
- Besides the final assessment of quality as judged by the customer can be assessed through the feedback mechanisms discussed in chapter 5.

9.8 Measuring Variations of Quality

In chapter 6, several methods are discussed which can be used to measure variation of quality.

9.9 Taking Corrective Action

The standards for the quality elements are discussed in chapter 4. Any deviation from the standard indicates that there is a problem in the service delivery system. Besides the variations of quality as measured in chapter 6, will also indicate the necessity for corrective action. The fundamental causes of these problems have to be found out for taking corrective action. Various problem solving tools as discussed in chapter 7 can be used to troubleshoot these fundamental causes.

9.10 Human Resource Management

The availability of quality manpower is the ultimate strength of a hotel organization. Hence, there is a definite need for effective management of the personnel. To accomplish the same the hotel should have specific systems to accomplish the following activities.

- Selection of candidates with right kind of attitudes rather than right kind of skills.
- Induction training should be given to selected candidates.
- There should be provision for regular service excellence classes for front line personnel to get acquainted with the latest mannerisms.
- Performance appraisal of the employees should reflect behavioral evaluation criteria as shown in Table 8.2 instead of outcome criteria.

- Employee satisfaction can be assessed at fixed intervals using criteria listed in Fig 8.3.
- Employees in a hotel organization should never be treated like a operator of a manufacturing concern. They should be empowered to take on the spot decisions for which management should clearly specify the extent to which an employee can bend the hotel guidelines to satisfy customer. The areas in which employees can be empowered is listed down in section 8.2.5.

9.11 Encouraging Creativity

Traditionally, in a hotel there are super-performers who ensure a high standard of service. They make excellent suggestions to improve the service. These people are able to identify customer's changing needs perfectly. The standardized procedures of quality system may discourage their activities and in turn harm the prospects of quality service. Hence, there should be a mechanism to encourage the initiatives from the employees across whole organization. To accomplish this company should establish following systems.

1. Allowing employees express their imaginations. This can be done through suggestion schemes, quality councils, formation of cross-sectional teams, encouraging supervisors to accept the suggestions during daily briefings etc.
2. Translating ideas into actions. Classification of the above suggestions can be done depending upon the amount of expenditure needed and the critical influence on customer satisfaction. Accordingly these initiatives can be settled at the departmental level or it can be referred to the top management. Very often the ordinary employees are unable to provide a full-fledged action plan to support their ideas. Hence the management should assign manpower to collect these rudimentary ideas and convert the same to a presentable form.
3. Follow-up. The achievement of the action plans should be publicized and communicated throughout the organization. Suitable incentives or recognition should be awarded to the employees who has suggested the idea. An important point to be considered is that employee should not be punished for the negative effect of the action plan. It should be treated as a voluntary action.

CONCLUSIONS, LIMITATIONS AND SCOPE FOR FURTHER WORK

10.1 Conclusions

In this study an attempt has been made to prepare a framework to guide the service organizations in their endeavor to achieve excellence in service. The focus of the study is on hotel service. The prescriptions, presented in the study, try to answer three basic predicaments faced by the organizations in implementing the quality management programme :

- (i) development of measure to control the service process to ensure the deliver of quality service.
- (ii) development of operational procedures for assessing the quality of actual service provided and taking corrective actions for improvement.
- (iii) development of suitable mechanisms to control the influence of various organizational issues who influence the quality of service delivery.

(i) Developing suitable measures to control service process.

Developing suitable measures has three perspectives

- describing the process
 - identifying the quality elements of the process
 - proposing suitable measurement and control mechanisms
- Service process can be visualized as a conglomeration of several service delivery systems which are interrelated through internal customer supplier relationships. Controlling the functioning of each of these service delivery systems will ensure the

is the first step in developing suitable measures to control the process. However, it is likely that no single person understands the process fully. The reason is the difficulty in visualizing all the activities that are actually performed in a delivery process. In a manufacturing industry the operations are easily represented by the process flow diagram, because the flow of material and its interaction with different machines is well defined. But in a service industry, such a process flow diagram will not be able to include all information associated with service activity. Hence there is a need to prepare a document that takes care of the complexities and undefined nature of service.

IDEF0 is found to be an effective instrument uniquely suited for preparing such a document. However, the level of details to which service process can be depicted through IDEF0 diagrams are found to be a point of contradiction while analyzing the hotel process. It is always possible to merge two consecutive stages into one or split one stage of diagram into two stages. Although by changing the number of stages the structure of IDEF0 diagrams is changed, it does not make any difference to the purpose of completely describing the process as long as the information is not lost while changing the number of stages.

- There is usually a set of several quality elements for each of these service systems which are responsible for success or failure of the system to deliver quality service. Hence identifying these quality elements is the key to control the service systems for delivering quality service.

For identifying these quality elements, it is proposed that the customer satisfaction parameters should be identified for the service delivery system and they are related to each stage of IDEF0 diagram to develop a blueprint. From the failpoints of the blueprint the quality elements can be identified. Using this approach, blueprints are prepared for each of service system of hotel and the list of quality elements are identified for these systems. From the analysis, it is found that this approach is highly successful in identifying every possible quality elements that a service system may have. A careful analysis will be able to discover almost all quality elements that may have

some influence on the delivery of quality service. However, while analyzing the hotel service to prepare the blueprints, it is recognized that the discrimination has to be made in :

- (a) the choice of customer satisfaction parameters for a particular service system, and
- (b) the choice of relationship of parameters with the each stage of IDEF0 i.e. which entity of a particular stage affect which parameter and how it influences that parameter.

These discriminations have an impact on the final structure of the blueprint. Hence, for a correct identification of the quality elements, the discrimination has to be carried out by sound judgment and after reviewing with the personnel involved in carrying out the process.

- As these quality elements are responsible for the success or failure of system to provide quality service, they should be properly controlled.

Hence, measurement and control mechanisms for each service system are proposed which include critical characteristic to be measured, the items it represents, measurement ways, control methods and possible standards. At present, hotels do not have any standard measurement and control methods Hence, all type of possible methods are discussed. Besides, it is found that the measurement and control methods for same type of quality elements are similar in nature and hence they are grouped together while describing the measurement and control methods.

Thus, it can be concluded that the task of development of measures to control the service process can be accomplished by carrying following three steps one by one.

- (a) describing the process through IDEF0 diagram for completely understanding the functioning of service system.

- (b) relating customer satisfaction parameters with the IDEF0 diagram to develop the blueprint of the process of the system and identifying the quality elements from the failpoints of the service system
- (c) developing suitable measurement and control methods for each quality element

(ii) Development of operational procedures

The operational procedures should be able to take care of two aspects of service quality

- assessment of quality of service provided, and
 - taking corrective action to improve service
-
- The development of measures as discussed above will not ensure quality service by itself. An organization has to continuously monitor the quality of service and identify the service processes that result in delivery of bad quality service and take corrective actions to rectify those service processes.

To identify these service processes, the obtaining customer feedback is a highly useful mechanism. Besides analyzing the variations in quality also helps to identify the critical service process requiring improvement. It is found that the hotels use one or more form of feedback mechanisms but don't have any method to analyze variations of quality. In this study, various feedback mechanisms are discussed and methods are proposed for analyzing variations of quality. Although all methods are useful, seeking customers feedback is through verbal communication is found to be highly effective in reading customer's mind. However, without trained manpower specifically trained for this purpose, which at present is not available in the hotels, it is difficult to obtain feedback through verbal communication. Amongst the methods that are proposed for analyzing variations, the use of statistical method to identify critical elements is highly effective in identifying the particular service process for quality improvement.

- After identifying the service process responsible for bad quality service, the trouble shooting should be done to identify the fundamental causes which are responsible for

the ineffective service process. Identification of these fundamental causes will help to take necessary corrective action for improving service.

Problem solving tools such as QFD, cause and effect diagram, process flow diagram that are used in manufacturing environment is found to be equally useful for trouble shooting to identify these causes in a service environment.

(iii) Developing suitable mechanisms to manage the influence of organizational issues

The organizational issues can be broadly categorized into two sets of issues with different implications for quality service. They are:

- human resource development
- effectiveness of system to provide better service
- The availability of quality manpower is the ultimate strength of a service organization in achieving the goal of providing quality service to its customers. Hence, the organization should have systematic procedures to manage human resources.

It is found that there are several dimensions to the human resource management (as outlined in the section 8.2) in hotel organisation. Providing adequate attention to monitor each of these issues will ensure the development of human resource. Of particular importance is the selection of candidates and job satisfaction of employees. It is found that the candidates who have right kind of attitudes to serve in a hotel environment is more useful than the candidates with the right kind of job skills. It is especially true for customer contact employees. Besides, it is a fact that an unsatisfied employee will not be able to satisfy a customer. By monitoring the level of job satisfaction through employee surveys will ensure that the employees never fail on their part to provide quality service.

- Along with human resource development, the issues related to the effectiveness systems (as outlined in the section 8.1) require proper understanding for achieving the goal of service quality.

Several potential issues which may influence quality of service is discussed. It is found that proper understanding of these issues will make it possible for making necessary plans to control their effect on quality service.

Finally, an organization requires a quality system which will give a broader view of how the various activities should be planned for and executed in a hotel for achieving quality service. Such a generic quality system (as proposed in chapter 9) will ensure that the quality is built into the hotel system rather than delivery of quality service being dependent upon the few individuals who are interested in satisfying customers.

10.2 Limitations

- The completeness of information provided in this study is based upon the understanding of the functioning of a hotel. Hence the descriptions of the service process may not have included all the activities in detail that has been carried out in practice.
- The proposed method for identifying quality elements is based upon sound logic. But, there is no data to confirm that controlling quality elements through proposed measurement and control mechanisms will actually result in better satisfaction. Only when the actual measurement of these quality elements can be done, the confirmation can be made.

10.3 Scope for Further Work

- The framework proposed in the study can be applied to other service organizations like technical education, hospitals where data can be readily assessed through questionnaires. This will confirm the effectiveness of proposed framework.
- The present study prescribe a method to identify logically the quality elements of a service delivery system. But, the way in which guest satisfaction parameters can be logically identified except customer surveys and customer complaints, can be researched upon. The input from psychology and other disciplines of humanities can be taken to propose such a method.

- An interesting benefit of the analysis of hotel process using IDEF0 and blueprint is the ability to develop an information system to be used for the better functioning of the hotel. Because this analysis depicts all information and their flow paths in graphical form that can be used to develop structure of an information system.

REFERENCES

- [1] Andruews Sudir; *Hotel Housekeeping Manual*, New Delhi: Tata Mcgraw Hill, 1982.
- [2] Bell D.; *The Coming of Post Industrial Society : A Venture in Social Forecasting*. New York: Basic Books, 1973.
- [3] Boot, Cox; *Statistical Analysis for Managerial Decisions*, New Delhi : Tata Mcgraw Hill.
- [4] Bowen D., Chase R., Cummings T., and Associates; *Service Management Effectiveness*, San Francisco: Jossey-Bass Publishers, 1990.
- [5] Bowen D., Lawler E.; " The empowerment of service workers: what, why, how, and when," *Sloan Management Review*, Spring 1992.
- [6] Bhuyan S. K.; "Evaluating Quality in Service", *Assurance Discipline, NIQR*, Dec. 1990.
- [7] Brown S., Gummesson E., Edvardsson B., Gustavsson B.; *Service Quality*, Toronto : Lexington Books, 1991.
- [8] CAM-I, *Architecture for Product Assurance*, ICAM program office, Wright Patterson Air Force Base, Ohio, 1984.
- [9] Jackson E. Keith; "Hospital process cannot be improved until they are understood" , *Quality Progress*, April 1992;
- [10] Kolarick W.; *Creating Quality - Concepts, Systems, Strategies*, New York : Mcgraw Hill, 1995.
- [11] Krishnamurthy, Rangaswamy; "The equity estimator for marketing research", *Marketing Science*, June 1987.
- [12] Lorentz J. Finson; "What are health care measurements", *Quality Progress*, April 1992.
- [13] Michael G.; "Managing customer contact employees", *Journal of Marketing*, April : 1995.
- [14] Rust T. Roland, Zahorick Anthony, Keiningham T.; "Return on quality (ROQ) : making service quality financially accountable", *Journal of Marketing*, 1995.

- [15] Rust, Zahorick; "Customer satisfaction, customer retention and market share", *Journal of Marketing*, June 1993;
- [16] Shostak G. Lynn; "Designing services that deliver", *Harvard Business Review*, Jan-Feb. 1984.
- [17] Shostak G. Lynn; "Service positioning through structural change", *Journal of Marketing*, Jan 1987.
- [18] Thomas F.; *Wiley Service Management Series, Brisbane* : John and Sons, 1979.
- [19] Wetherbe James; *Systems Analysis and Design*, West publishing company, 1984.